



MP

ALDEN SUPPLY CO.
ED. HERMAN

CATALOG 10-1

PRODUCTION
MAINTENANCE
CONSTRUCTION

Master Power

A ***Black & Decker*** Subsidiary

QUALITY AIR TOOLS

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Impact Wrenches

Master Power

MODEL 9200 Side to Center 15/16"

1/4" Bolt Capacity
Air Inlet 1/4" F.P.T.

Small — Fast — Efficient. Instantly reversed by moving thumb lever. No springs or gears — has patented impact mechanism that is foolproof and extremely durable. Drives bolts, nuts, screws and studs — fine for tapping.

SPECIFICATIONS

Model No.	Drive Shank	Length Inches	Net Weight Pounds	Operating Range Ft. Lb.*
9200	1/2" Sq.	7 3/8	3 lb. 8 oz.	10-30
9200B	3/8" Sq.	7 3/8	3 lb. 8 oz.	10-30
9200C	7/16" Hex Quick Change	8 1/2	3 lb. 14 oz.	10-30
9200D	1/2" Sq. 3" Ext.	10 3/8	3 lb. 12 oz.	10-25
9200E	1/2" Sq. 6" Ext.	13 3/8	4 lb.	10-25

* To be obtained in 4 seconds.

Optional Equipment: 920-52 Suspension Bail.

Ball Type Socket Retainers available on special order

MODEL 9502 Side to Center 1-5/16"

3/8 to 1/2" Bolt Capacity
Air Inlet 1/4" F.P.T.

High speed rundown, 6500 R.P.M., and positive air actuated clutch speeds work, increases production. Cam actuated throttle valve requires only light finger pressure. "Locked-in" motor for constant speed, steady power . . . large oil reservoir for constant lubrication . . . protected reverse valve. Rugged high strength aluminum alloy motor housing, bolted to steel clutch housing for proper alignment of high speed motor parts. Easily dismantled for regular maintenance.

SPECIFICATIONS

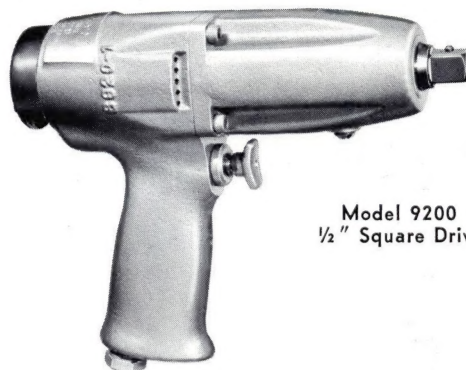
Model No.	Drive Shank	Length Inches	Net Weight Pounds	Operating Range Ft. Lb.*
9502	1/2 x Sq.	7	5 lb. 13 oz.	25-80
9502A	5/8" Sq.	7	5 lb. 13 oz.	25-80
9502C	7/16" Hex Quick Change	8	5 lb. 15 oz.	25-80
9502D	1/2" Sq. 3" Ext.	9 7/8	6 lb. 3 oz.	25-70
9502E	1/2" Sq. 6" Ext.	12 3/4	6 lb. 4 oz.	25-70

* To be obtained in 4 seconds.

Optional Equipment: One #700068 Suspension Bail.

Ball Type Socket Retainers available on special order.

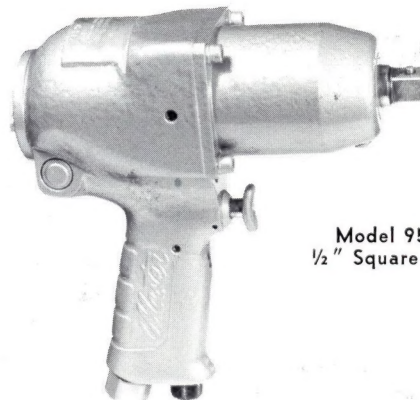
Air Regulators optional when ordered with Impact Wrenches



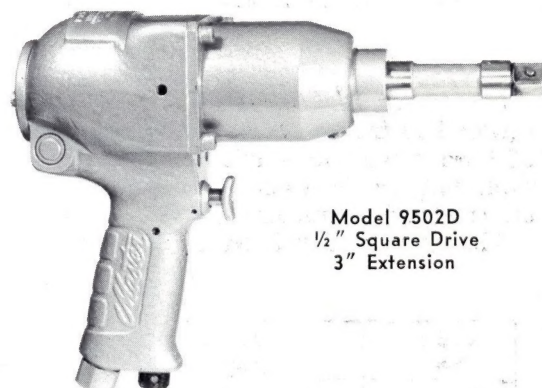
Model 9200
1/2" Square Drive



Model 9200C
7/16" Hex Quick-Change Chuck



Model 9502
1/2" Square Drive



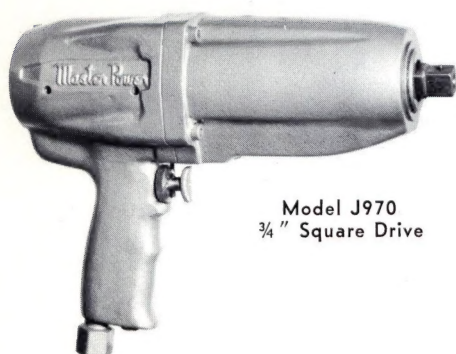
Model 9502D
1/2" Square Drive,
3" Extension



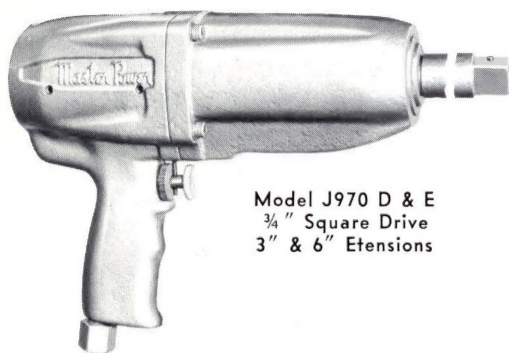
950-519
Air Regulator
For 9502 Impact Wrench



920-513
Air Regulator
For 9200 Impact Wrench



Model J970
3/4" Square Drive



Model J970 D & E
3/4" Square Drive
3" & 6" Extensions

MODEL J 970 Side to Center 2"

3/4" Bolt Capacity
Air Inlet 3/8" F.P.T.

Built-in Air Regulator

Excellent for tightening nuts, bolts, screws and studs. Rugged and compact for long life — easily used as a one hand tool. Built in air control regulator — no gears — no springs — high power output. Reversible, only two impacting parts. Patented impact mechanism eliminates torque reaction.

SPECIFICATIONS

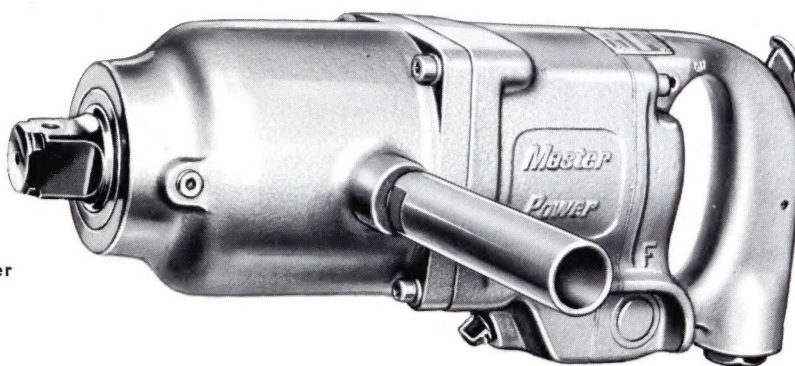
Model No.	Drive Shank	Length Inches	Net Weight Pounds	Operating Range Ft. Lb.*
J970	3/4" Sq.	10 3/4	12 lb. 4 oz.	80-275
J970A	1" Sq.	10 3/4	12 lb. 8 oz.	80-275
J970B	5/8" Sq.	10 3/4	12 lb. 4 oz.	80-275
J970C	5/8" Hex. Fem. Quick Change	12 3/4	13 lb.	80-275
J970D	3/4" - 3" Ext.	13 3/4	12 lb. 15 oz.	80-250
J970E	3/4" - 6" Ext.	16 3/4	13 lb. 12 oz.	80-250

* To be obtained in 4 seconds.

Standard Equipment: One 970-146 Suspension Bail.

MODEL 990

1-1/4" Bolt Capacity



MODEL 990

1" Square Drive, Outside Trigger

Operating Range
250 to 1200 Foot Pounds

Job tested for more than a year, the new Master Power 990 Impact Wrench has a documented record of high power, long life performance in steel erection, ship yards, steel mills, and rail yards . . . on off-the-road equipment and truck assembly.

The tried and proved ball and race principle of

smooth, almost frictionless rolling action, coupled with a precision engineered, cam-timed impact mechanism engages and releases impact blows with positive, precise timing. No snap rings, no springs, no lost motion. A compact, light weight, rugged tool designed for 1 1/4" high tensile bolting.

SPECIFICATIONS

Model No.	Bolt Size Capacity, Inches	Weight Pounds	Shank Size	Spindle Offset	Length Less Socket Drive	Air Inlet
990	1 1/4 High Tensile	21 lbs.	1"	2 3/16"	13 1/4"	3/8"
990D	1 1/4 High Tensile	2- lbs. 4 oz.	1" - 3" Ext.	2 3/16"	16 1/4"	3/8"
990E	1 1/4 High Tensile	21 lbs. 8 oz.	1" - 6" Ext.	2 3/16"	19 1/4"	3/8"
990S	1 1/4 High Tensile	21 lbs. 6 oz.	Spline	2 3/16"	13 1/4"	3/8"

Standard Equipment: Side handle, suspension bail, outside trigger, built-in lubricator.

Optional Equipment: Inside trigger, malleable clutch housing.

IMPACT WRENCH SOCKETS

Hex Sockets



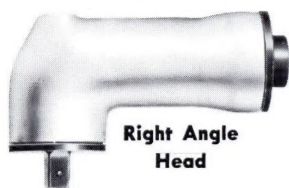
1/2" Square Drive		5/8" Square Drive		3/4" Square Drive		1" Square Drive	
Dimension Across Flats	Part No.	Dimension Across Flats	Part No.	Dimension Across Flats	Part No.	Dimension Across Flats	Part No.
3/8"	22766	7/16"	718980	3/4"	38318	1-1/8"	718932
7/16"	22768	1/2"	718981	13/16"	38319	1-3/16"	718933
1/2"	22770	9/16"	718982	7/8"	38320	1-1/4"	718934
9/16"	22772	5/8"	718983	15/16"	38321	1-5/16"	718935
5/8"	22774	11/16"	718984	1"	38322	1-3/8"	718936
11/16"	22776	3/4"	718985	1-1/16"	38323	1-7/16"	718937
3/4"	22778	13/16"	718986	1-1/8"	38324	1-1/2"	718938
13/16"	22780	7/8"	718987	1-3/16"	38325	1-9/16"	718939
7/8"	22782	15/16"	718988	1-1/4"	38326	1-5/8"	718940
15/16"	22784	1"	718989	1-5/16"	38327	1-11/16"	718941
1"	22786	1-1/16"	718990	1-3/8"	38328	1-3/4"	718942
1-1/16"	38284	1-1/8"	718991	1-7/16"	38329	1-13/16"	718943
				1-1/2"	38330	1-7/8"	718944
						1-15/16"	718945
						2"	718946

Double Square Sockets



1/2" Square Drive		3/4" Square Drive		1" Square Drive		1" Square Drive	
Dimension Across Flats	Part No.	Dimension Across Flats	Part No.	Dimension Across Flats	Part No.	Dimension Across Flats	Part No.
3/4"	38331	3/8"	22767	1-1/4"	718922	1-1/4"	718921
13/16"	38332	7/16"	22769			1-7/16"	718923
7/8"	38333	1/2"	22771	1-7/16"	718924	1-7/16"	718923
15/16"	38334	9/16"	22773	1-5/8"	718926	1-5/8"	718925
1"	38335	5/8"	22775			1-13/16"	718927
1-1/16"	38336	11/16"	22777				
1-1/8"	38337	3/4"	22779				
1-3/16"	38338	13/16"	22781				
1-1/4"	38339	7/8"	22783				
1-5/16"	38340	1"	22787				

Single Square Sockets



Right Angle Head

Cat. No. 38285
For Models 9200 and 9502



Universal Joint
Max. Angle 30°

Cat. No. 33410
For Models 9200 and 9502

Cat. No. 38315
For Model J970



Tap Chuck — Collet Type

Cat. No. 33339
3/16" to 3/8" Dia. Shanks
For 9200 and 9502

Cat. No. 32330

Extra Collet for 5/16" to 1/2" shanks. Use with above chuck.



Extensions

For Models 9200 and 9502
1/2" Sq. Drive

33409 5 inch Ext.
38317 7 inch Ext.
38283 10 inch Ext.

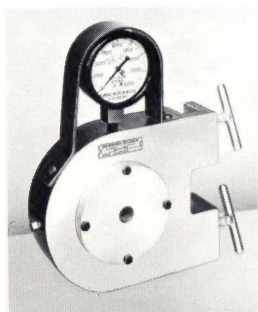


Adapter
No. 38311 From 1/2" to 5/8"
No. 38316 From 3/4" to 5/8"



Screw Driver Bit Chuck

Cat. No. 73345
Takes 7/16" Hex Screwdriver Bits, Socket Adapters and Hex Drive Bits



Skidmore-Wilhelm portable calibrator. Tests torque output of impact wrenches, and tensile strength of screws, nuts and bolts. Clamps on column or beam in test, or work area. Tension on bolts is indicated directly on hydraulic gauge.

No. TA-3
3/8" to 1" Bolt size capacity
No. TA-4
3/4" to 1 1/4" Bolt size capac.

1/2" Drivers For Hollow Head Screws

Set Screw Size	Cap Screw Size	Cat. No.	Set Screw Size	Cap Screw Size	Cat. No.
1/4"	#8	719999	5/8"	3/8-7/16"	719994
5/16"	#10	719998	3/4"	1/2"	719993
3/8"	1/4"	719997	7/8"	5/8"	719993
7/16"	5/16"	719996	1"	3/4-7/8"	719991
1/2"		719995		1"	719990

7/16" Hex Shank Bits & Bit-Finder Assemblies

Screw Size and Type	Cat. No. Bit Only	Cat. No. Bit & Finder	Length Inches
#12	5110	5343	2 1/2
#12	15062	15098	6
#14 Wood 1/4" Machine	5112	5344	2 1/2
#14 Wood 1/4" Machine	15065	15101	4
#14 Wood 1/4" Machine	15066	15102	6
#16 Wood 5/16" Fillister	5114	5329	2 1/2
#16 Wood 5/16" Fillister	15070	15106	6
#18 Wood 5/16" Sheet Metal	5116	5364	2 5/8
#20 Wood 5/16" Machine	5118	5366	2 3/4
#24 Wood 3/8" Machine	5120	5369	2 3/4

7/16" Hex Shank Socket Adapters

Catalog No.	Square Drive	Length
22792	3/8"	2 3/4"
22793	3/8"	5"
22794	1/2"	2 3/4"
22794	1/2"	5"

7/16" Hex Shank Hex Drive Bits

Cat. No.	Across Flats Dimension	For Cap Screws	For Set Screws	For Pipe Plugs
17892	3/16"	1/4"	3/8"	1/8"
19223	7/32"	5/16"	7/16"	—
26842	1/4"	—	1/2 Allen	1/4"
18977	5/16"	3/8-7/16"	5/8"	3/8"
23492	3/8"	1/2-9/16"	3/4"	1/2"

7/16" Hex Shank Bit Extensions

Cat. No.	Length	For
14989	6" Long	7/16" Hex Socket
.5288	10" Long	7/16" Hex Socket

SCREWDRIVER NUTSETTER
SELECTION DATA

Selection of a screwdriver or nutrunner should be made only after a thorough consideration of the various factors that affect your particular fastening application.

Those factors to be examined include the type and size of the screw, nut or bolt to be driven, the nature of the fastening job, whether it is concerned with a free-running thread, pull-up on a compressible joint, or perhaps the increasing resistance of a wood screw or a self-tapping fastener in thick material.

To be analyzed too are the clutch type requirements, the correct tool speed and torque range, the ideal shape for the job at hand, lever type, pistol grip, or angle head driver, and the possible need for reversibility.

Resistance characteristics of the most common types of screwdriving applications are charted below (Figure II), as well as suggested maximum torque values for fasteners of various materials. (Figure I).

The following 18 pages illustrate and describe in detail the wide selection of Master Power screwdrivers and nutrunners available for industrial fastening applications. Each model is listed with its speed, clutch type, torque range, weight, dimensions, and the machine screw size which is within that particular model's capacity.

Figure I

SUGGESTED MAXIMUM TORQUE VALUES FOR FASTENERS OF DIFFERENT MATERIALS			
Screw or Bolt Size	Low Carbon Steel	Brass	Aluminum 24 ST-4
	Values in Inch Pounds		
2	2.4	2.3	1.5
3	3.7	3.4	2.2
4	5.3	4.8	3.3
5	7.7	7.0	4.7
6	9.8	8.1	6.0
8	18.8	17.1	11.4
10	25.3	22.2	16.5
1/4 "	82.5	69.2	51.3

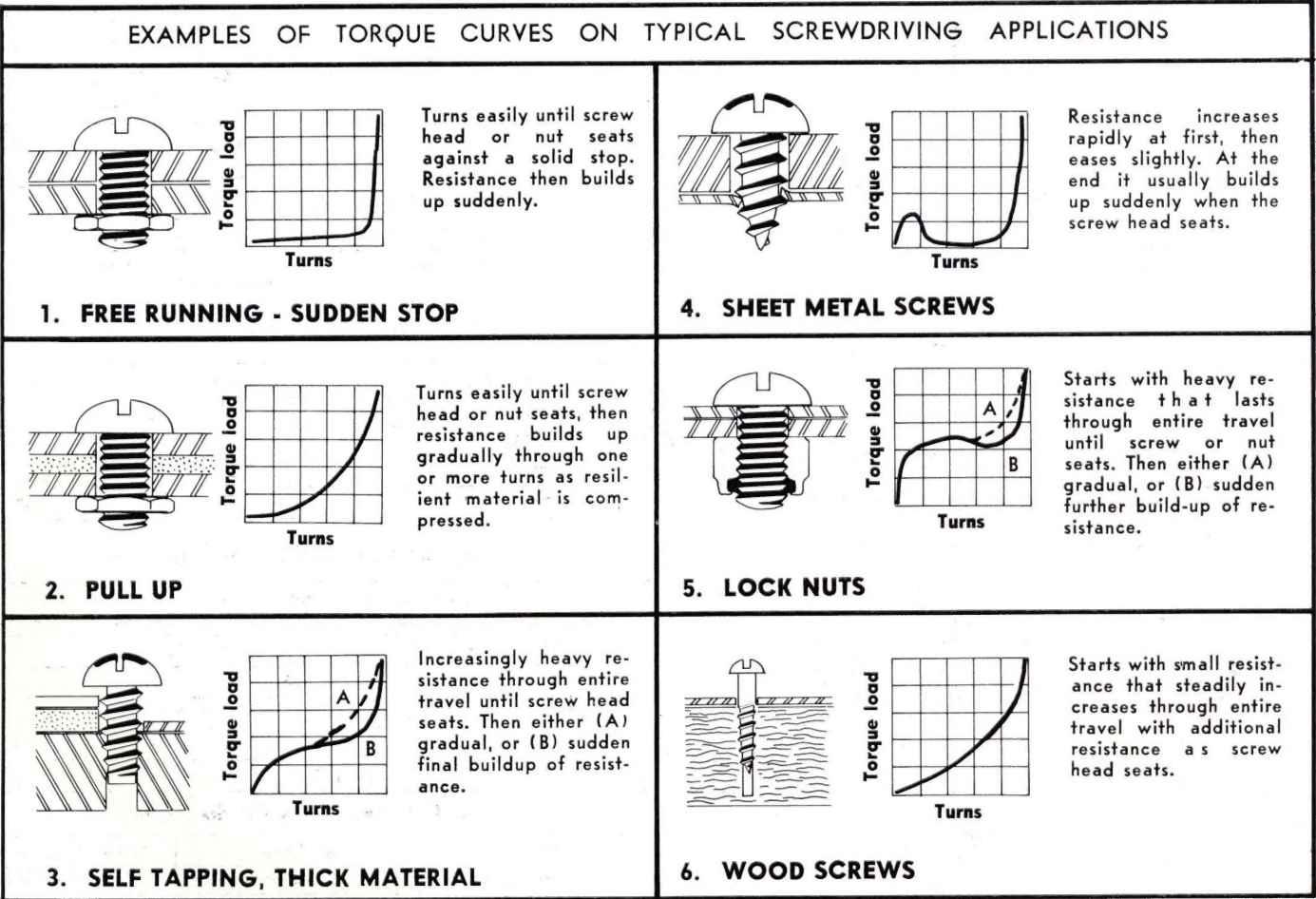
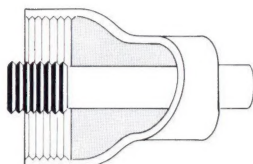


Figure II

DIRECT DRIVE:



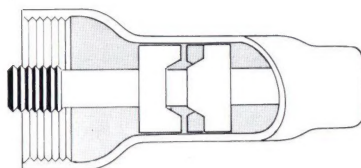
DIRECT DRIVE CHARACTERISTICS

Screw Size	Free Running	Self Tapping	Wood Screws	Gathering With Resilient Materials
No. 6 & Smaller	Fair	Fair	Excellent	Excellent
No. 7 & Larger	Fair	Fair	Excellent	Excellent

Direct drive, often referred to as a "stall torque drive", is merely an extension of the driving shaft of the tool. It rotates the fastener until resistance overcomes the power of the motor, at which point the air motor simply stalls.

Controlled air pressure, through a pressure regulator on the air line installation, will govern the torque applied to the fastener, and constant uniform pressure at the tool will permit close uniformity of fastener settings.

POSITIVE CLUTCH:



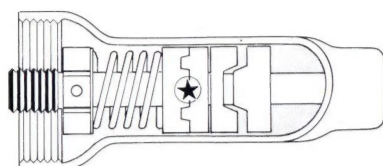
POSITIVE CLUTCH CHARACTERISTICS

Screw Size	Free Running	Self Tapping	Wood Screws	Gathering With Resilient Materials
No. 6 & Smaller	Not Recommended	Excellent	Excellent	Fair
No. 7 & Larger	Fair	Excellent	Excellent	Fair

Positive clutches enable the operator to engage bits or sockets to the screw, or nut while the air motor is running, allowing a rapid transfer from one fastener to the next.

Clutch jaws, held apart by a center spring, engage only when forward pressure is released, or fastener resistance overcomes motor torque, as in the case of direct drive tools.

ADJUSTABLE CLUTCH:



ADJUSTABLE CLUTCH CHARACTERISTICS

Screw Size	Free Running	Self Tapping	Wood Screws	Gathering With Resilient Materials
No. 6 & Smaller	Excellent	Fair	Fair	Excellent
No. 7 & Larger	Fair	Not Recommended	Not Recommended	Not Recommended

Adjustable clutches have characteristics particularly desirable on free-running sudden stop applications. In addition to a positive disengaging set of clutch jaws (permitting rapid transfer from one fastener to another) an additional set of clutch jaws with 25°, or 45° faces are held in engagement by an adjustable spring pressure.

With the combination of proper air pressure, adjustable spring tension, and choice of angle faces on the secondary clutch, the tool can be set for varying degrees of tightness, and will consistently repeat specific torque settings on long production runs.

Adjustable Clutch with 25° Jaws 20 to 50 Inch Pounds
Adjustable Clutch with 45° Jaws 5 to 25 Inch Pounds ★

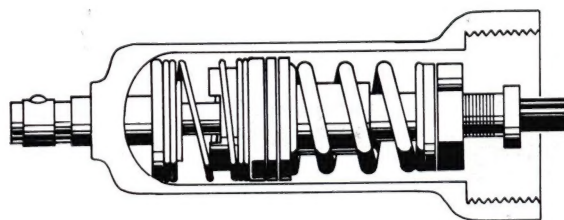
TORQUE LIMITER CLUTCHES . . USED WITH 811 and 831 MOTORS. SEE PAGES 21 and 22

Frictionless, ball bearing principle assures absolute torque accuracy with or without lubrication, and does so in spite of possible air pressure fluctuations. The Master Power limiter reacts to the predetermined torque setting every time.

Because it cannot be influenced by the operator, it is FOOL PROOF. Negative angle engaging jaws prevent accidental release due to relaxing of pressure by the operator. The Master Power Limiter is always completely re-engaged and ready for action, even when the operator works with the tool motor running continuously between operations, or goes into the work with a dead motor.

The torque sensitive mechanism is ready for instant release when the predetermined torque is reached . . . but never before the proper torque is reached.

Should the unit be removed from the work before the predetermined setting is reached, it can be again placed on the work and will still release at the proper torque setting.



Torque Limiter - AT 70

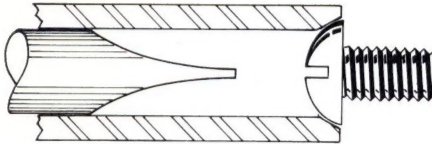
Range 2 to 25 Inch Pounds

Torque Limiter - AT 71

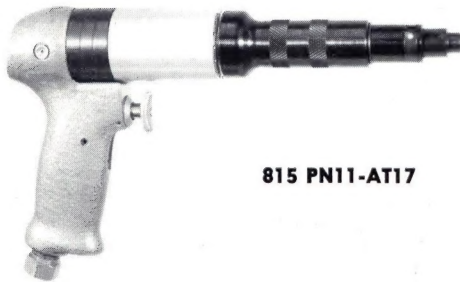
Range 15 to 85 Inch Pounds

Model	Weight	Housing Length	Side to Center	Spindle Extension
AT70	7 1/2 oz.	3-1/2"	9/16"	7/8"
AT71	12 1/2 oz.	4-7/16"	11/16"	7/8"

WITH BUILT-IN FINDERS
NORMALLY USED FOR SLOTTED HEAD SCREWS



815 LN6-AT10



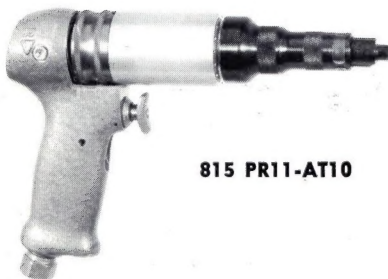
815 PN11-AT17



Built-in Finder



815 LR6-AT22



815 PR11-AT10



Standard 1/4" Hex Bit

NON-REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE							
815LN6-AT10	600	Dir. Dr.	45-90	1 3/4	8 1/2	1/2	10-1/4
815LN6-AT17	600	Positive	45-90	2	9 7/8	1/2	10-1/4
815LN6-AT22	600	Adjust.	20-50	2 1/8	9 7/8	1/2	8-12
815LN11-AT10	1100	Dir. Dr.	25-50	1 3/4	8 1/2	1/2	8-12
815LN11-AT17	1100	Positive	25-50	2	9 7/8	1/2	8-12
815LN11-AT22	1100	Adjust.	20-50	2 1/8	9 7/8	1/2	8-12
815LN18-AT10	1800	Dir. Dr.	12-25	1 1/2	7 11/16	1/2	6-8
815LN18-AT17	1800	Positive	12-25	1 3/4	9 1/16	1/2	6-8
815LN18-AT22-3	1800	Adjust.	5-25	1 7/8	9 1/16	1/2	4-8
PISTOL GRIP							
815PN6-AT10	600	Dir. Dr.	45-90	2 1/4	7 7/8	1/2	10-1/4
815PN6-AT17	600	Positive	45-90	2 1/2	9	1/2	10-1/4
815PN6-AT22	600	Adjust.	20-50	2 5/8	9	1/2	8-12
815PN11-AT10	1100	Dir. Dr.	25-50	2 1/4	7 7/8	1/2	8-12
815PN11-AT17	1100	Positive	25-50	2 1/2	9	1/2	8-12
815PN11-AT22	1100	Adjust.	20-50	2 5/8	9	1/2	8-12
815PN18-AT10	1800	Dir. Dr.	12-25	1 7/8	6 11/16	1/2	6-8
815PN18-AT17	1800	Positive	12-25	2 1/8	8 1/16	1/2	6-8
815PN18-AT22-3	1800	Adjust.	5-25	2 1/4	8 3/16	1/2	4-8

REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE							
815LR6-AT10	600	Dir. Dr.	45-90	1 3/4	8 1/2	1/2	10-1/4
815LR6-AT17	600	Positive	45-90	2	9 7/8	1/2	10-1/4
815LR6-AT22	600	Adjust.	20-50	2 1/8	9 7/8	1/2	8-12
815LR11-AT10	1100	Dir. Dr.	25-50	1 3/4	8 1/2	1/2	8-12
815LR11-AT17	1100	Positive	25-50	2	9 7/8	1/2	8-12
815LR11-AT22	1100	Adjust.	20-50	2 1/8	9 7/8	1/2	8-12
815LR18-AT10	1800	Dir. Dr.	12-25	1 1/2	7 11/16	1/2	6-8
815LR18-AT17	1800	Positive	12-25	1 3/4	9 1/16	1/2	6-8
815LR18-AT22-3	1800	Adjust.	5-25	1 7/8	9 1/16	1/2	4-8
PISTOL GRIP							
815PR6-AT10	600	Dir. Dr.	45-90	2 1/4	7 7/8	1/2	10-1/4
815PR6-AT17	600	Positive	45-90	2 1/2	9	1/2	10-1/4
815PR6-AT22	600	Adjust.	20-50	2 5/8	9	1/2	8-12
815PR11-AT10	1100	Dir. Dr.	25-50	2 1/4	7 7/8	1/2	8-12
815PR11-AT17	1100	Positive	25-50	2 1/2	9	1/2	8-12
815PR11-AT22	1100	Adjust.	20-50	2 5/8	9	1/2	8-12
815PR18-AT10	1800	Dir. Dr.	12-25	1 7/8	6 11/16	1/2	6-8
815PR18-AT17	1800	Positive	12-25	2 1/8	8 1/16	1/2	6-8
815PR18-AT22-3	1800	Adjust.	5-25	2 1/4	8 3/16	1/2	4-8

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Bit (No. 719740) and non-magnetic finder (No. 719840) for 6F8R screw. Any other size furnished if specified. Magnetic finders available at extra cost.

Caution should be used in applying lever handle units with direct drive or positive clutch above 50 inch pounds because of high torque reaction to the operator.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

Optional: No. 700060 Long Throttle Lever for Model 815 Screwdrivers and Nutsetters available on special order.

815 Series Screwdrivers

Master Power

WITH QUICK-CHANGE CHUCK
TAKES 1/4-INCH HEX BITS, EXTENSION BIT-AND-FINDER UNITS,
INSERT BIT HOLDERS, SOCKET ADAPTERS AND NUTSETTERS

NON-REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE							
815LN6-AT13	600	Dir. Dr.	45-90	1 5/8	7 7/8	1/2	10-1/4
815LN6-AT19	600	Positive	45-90	2	9 7/8	1/2	10-1/4
815LN6-AT24	600	Adjust.	20-50	2 1/8	9 7/8	1/2	8-12
815LN11-AT13	1100	Dir. Dr.	25-50	1 5/8	7 7/8	1/2	8-12
815LN11-AT19	1100	Positive	25-50	2	9 7/8	1/2	8-12
815LN11-AT24	1100	Adjust.	20-50	2 1/8	9 7/8	1/2	8-12
815LN18-AT13	1800	Dir. Dr.	12-25	1 3/8	7 1/8	1/2	6-8
815LN18-AT19	1800	Positive	12-25	1 3/4	9 1/8	1/2	6-8
815LN18-AT24-3	1800	Adjust.	5-25	1 7/8	9 1/8	1/2	4-8
PISTOL GRIP							
815PN6-AT13	600	Dir. Dr.	45-90	2 1/8	7	1/2	10-1/4
815PN6-AT19	600	Positive	45-90	2 1/2	9	1/2	10-1/4
815PN6-AT24	600	Adjust.	20-50	2 5/8	9	1/2	8-12
815PN11-AT13	1100	Dir. Dr.	25-50	2 1/8	7	1/2	8-12
815PN11-AT19	1100	Positive	25-50	2 1/2	9	1/2	8-12
815PN11-AT24	1100	Adjust.	20-50	2 5/8	9	1/2	8-12
815PN18-AT13	1800	Dir. Dr.	12-25	1 5/8	6 3/8	1/2	6-8
815PN18-AT19	1800	Positive	12-25	2 1/8	8 3/8	1/2	6-8
815PN18-AT24-3	1800	Adjust.	5-25	2 1/4	8 3/8	1/2	4-8

REVERSIBLE

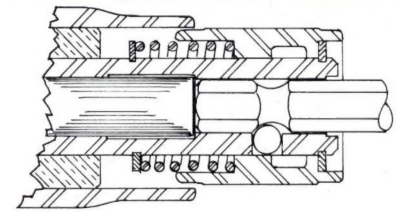
Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE							
815LR6-AT13	600	Dir. Dr.	45-90	1 5/8	7 7/8	1/2	10-1/4
815LR6-AT19	600	Positive	45-90	2	9 7/8	1/2	10-1/4
815LR6-AT24	600	Adjust.	20-50	2 1/8	9 7/8	1/2	8-12
815LR11-AT13	1100	Dir. Dr.	25-50	1 5/8	7 7/8	1/2	8-12
815LR11-AT19	1100	Positive	25-50	2	9 7/8	1/2	8-12
815LR11-AT24	1100	Adjust.	20-50	2 1/8	9 7/8	1/2	8-12
815LR18-AT13	1800	Dir. Dr.	12-25	1 3/8	7 1/8	1/2	6-8
815LR18-AT19	1800	Positive	12-25	1 3/4	9 1/8	1/2	6-8
815LR18-AT24-3	1800	Adjust.	5-25	1 7/8	9 1/8	1/2	4-8
PISTOL GRIP							
815PR6-AT13	600	Dir. Dr.	45-90	2 1/8	7	1/2	10-1/4
815PR6-AT19	600	Positive	45-90	2 1/2	9	1/2	10-1/4
815PR6-AT24	600	Adjust.	20-50	2 5/8	9	1/2	8-12
815PR11-AT13	1100	Dir. Dr.	25-50	2 1/8	7	1/2	8-12
815PR11-AT19	1100	Positive	25-50	2 1/2	9	1/2	8-12
815PR11-AT24	1100	Adjust.	20-50	2 5/8	9	1/2	8-12
815PR18-AT13	1800	Dir. Dr.	12-25	1 3/4	6 3/8	1/2	6-8
815PR18-AT19	1800	Positive	12-25	2 1/8	8 3/8	1/2	6-8
815PR18-AT24-3	1800	Adjust.	5-25	2 1/4	8 3/8	1/2	4-8

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

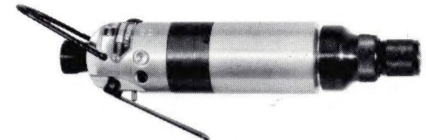
Caution should be used in applying lever handle units with direct drive or positive clutch above 50 inch pounds because of high torque reaction to the operator.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

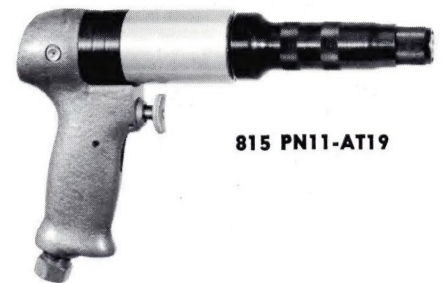
Optional: No. 700060 Long Throttle Lever for Model 815 Screwdrivers and Nutsetters available on special order.



Generally used where bits or sockets are subject to frequent change.



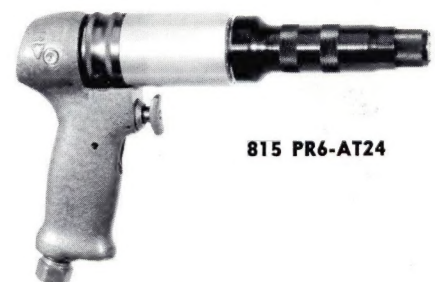
815 LN6-AT13



815 PN11-AT19



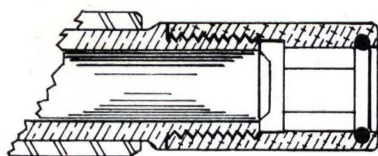
815 LR18-AT13



815 PR6-AT24



WITH BUILT-IN, REPLACEABLE TIP MAGNETIC BIT HOLDERS
FOR 1/4-IN. INSERT BITS



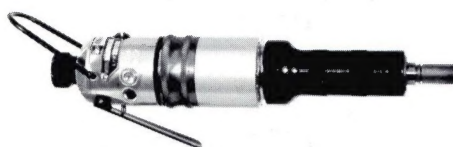
Magnetic Holder - Replaceable Tip



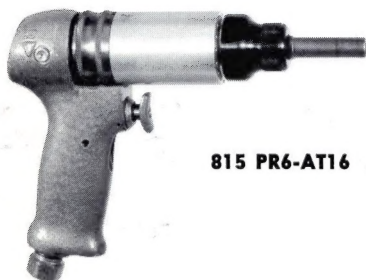
815 LN6-AT16-1



815 PN11-AT61



815 LR18-AT62-8



815 PR6-AT16



NON-REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE							
815LN6-AT16-1	600	Dir. Dr.	45-90	1 3/4	8 1/4	1/4	10-1/4
815LN6-AT61-1	600	Positive	45-90	2	9 1/8	1/2	10-1/4
815LN6-AT62-6	600	Adjust.	20-50	2 1/8	9 1/8	1/2	8-12
815LN11-AT16-1	1100	Dir. Dr.	25-50	1 3/4	8 1/4	1/4	8-12
815LN11-AT61-1	1100	Positive	25-50	2	9 1/8	1/2	8-12
815LN11-AT62-6	1100	Adjust.	20-50	2 1/8	9 1/8	1/2	8-12
815LN18-AT16-1	1800	Dir. Dr.	12-25	1 1/2	7 7/8	1/4	6-8
815LN18-AT61-1	1800	Positive	12-25	1 3/4	9	1/2	6-8
815LN18-AT62-8	1800	Adjust.	5-25	1 7/8	9	1/2	4-8
PISTOL GRIP							
815PN6-AT16-1	600	Dir. Dr.	45-90	2 1/4	7 3/8	1/4	10-1/4
815PN6-AT61-1	600	Positive	45-90	2 1/2	8 15/16	1/2	10-1/4
815PN6-AT62-6	600	Adjust.	20-50	2 5/8	8 15/16	1/2	8-12
815PN11-AT16-1	1100	Dir. Dr.	25-50	2 1/4	7 3/8	1/4	8-12
815PN11-AT61-1	1100	Positive	25-50	2 1/2	8 15/16	1/2	8-12
815PN11-AT62-6	1100	Adjust.	20-50	2 5/8	8 15/16	1/4	8-12
815PN18-AT16-1	1800	Dir. Dr.	12-25	1 7/8	6 9/16	1/4	6-8
815PN18-AT61-1	1800	Positive	12-25	2 1/8	8 1/8	1/2	6-8
815PN18-AT62-8	1800	Adjust.	5-25	2 1/4	8 1/8	1/2	4-8

REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE							
815LR6-AT16-1	600	Dir. Dr.	45-90	1 3/4	8 1/4	1/4	10-1/4
815LR6-AT61-1	600	Positive	45-90	2	9 1/8	1/2	10-1/4
815LR6-AT62-6	600	Adjust.	20-50	2 1/8	9 1/8	1/2	8-12
815LR11-AT16-1	1100	Dir. Dr.	25-50	1 3/4	8 1/4	1/4	8-12
815LR11-AT61-1	1100	Positive	25-50	2	9 1/8	1/2	8-12
815LR11-AT62-6	1100	Adjust.	20-50	2 1/8	9 1/8	1/2	8-12
815LR18-AT16-1	1800	Dir. Dr.	12-25	1 1/2	7 7/8	1/4	6-8
815LR18-AT61-1	1800	Positive	12-25	1 3/4	9	1/2	6-8
815LR18-AT62-8	1800	Adjust.	5-25	1 7/8	9	1/2	4-8
PISTOL GRIP							
815PR6-AT16-1	600	Dir. Dr.	45-90	2 1/4	7 3/8	1/4	10-1/4
815PR6-AT61-1	600	Positive	45-90	2 1/2	8 15/16	1/2	10-1/4
815PR6-AT62-6	600	Adjust.	20-50	2 5/8	8 15/16	1/2	8-12
815PR11-AT16-1	1100	Dir. Dr.	25-50	2 1/4	7 3/8	1/4	8-12
815PR11-AT61-1	1100	Positive	25-50	2 1/2	8 15/16	1/2	8-12
815PR11-AT62-6	1100	Adjust.	20-50	2 5/8	8 15/16	1/2	8-12
815PR18-AT16-1	1800	Dir. Dr.	12-25	1 7/8	6 9/16	1/4	6-8
815PR18-AT61-1	1800	Positive	12-25	2 1/8	8 1/8	1/2	6-8
815PR18-AT62-8	1800	Adjust.	5-25	2 1/4	8 1/8	1/2	4-8

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Caution should be used in applying lever handle units with direct drive or positive clutch above 50 inch pounds because of high torque reaction to the operator.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

Optional: No. 700060 Long Throttle Lever for Model 815 Screwdrivers and Nutsetters available on special order.

835 Series Screwdrivers

NON-REVERSIBLE

Master Power

WITH BUILT-IN FINDERS NORMALLY USED FOR SLOTTED HEAD SCREWS

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE							
835LN6-AT10	600	Dir. Dr.	80-160	2 1/8	9 1/4	1/2	1/4 - 5/8
835LN6-AT17	600	Positive	80-100	2 1/4	10 5/8	1/2	12-1/4
835LN6-AT22	600	Adjust.	20-50	2 3/8	10 5/8	1/2	8-12
835LN9-AT10	900	Dir. Dr.	60-120	2 1/8	9 1/4	1/2	12-1/4
835LN9-AT17	900	Positive	60-100	2 1/4	10 5/8	1/2	12-1/4
835LN9-AT22	900	Adjust.	20-50	2 3/8	10 5/8	1/2	8-12
835LN12-AT10	1200	Dir. Dr.	40-80	2 1/8	9 1/4	1/2	10-1/4
835LN12-AT17	1200	Positive	40-80	2 1/4	10 5/8	1/2	10-1/4
835LN12-AT22	1200	Adjust.	20-50	2 3/8	10 5/8	1/2	8-12
835LN24-AT10	2400	Dir. Dr.	20-40	1 7/8	8 9/16	1/2	8-10
835LN24-AT17	2400	Positive	20-40	2	9 15/16	1/2	8-10
835LN24-AT22	2400	Adjust.	5-25	2 1/8	9 15/16	1/2	4-10
PISTOL GRIP							
835PN6-AT10	600	Dir. Dr.	80-160	2 1/2	7 9/16	1/2	1/4 - 5/8
835PN6-AT17	600	Positive	80-100	2 5/8	8 15/16	1/2	12-1/4
835PN6-AT22	600	Adjust.	20-50	2 3/4	8 15/16	1/2	8-12
835PN9-AT10	900	Dir. Dr.	60-120	2 1/2	7 9/16	1/2	12-1/4
835PN9-AT17	900	Positive	60-100	2 5/8	8 15/16	1/2	12-1/4
835PN9-AT22	900	Adjust.	20-50	2 3/4	8 15/16	1/2	8-12
835PN12-AT10	1200	Dir. Dr.	40-80	2 1/2	7 9/16	1/2	10-1/4
835PN12-AT17	1200	Positive	40-80	2 5/8	8 15/16	1/2	10-1/4
835PN12-AT22	1200	Adjust.	20-50	2 3/4	8 15/16	1/2	8-12
835PN24-AT10	2400	Dir. Dr.	20-40	2 1/4	6 7/8	1/2	8-10
835PN24-AT17	2400	Positive	20-40	2 3/8	8 1/4	1/2	8-10
835PN24-AT22	2400	Adjust.	5-25	2 1/2	8 1/4	1/2	4-10



For proper fit see bit and finder table, Page 24



835 LN12-AT10



835 PN24-AT17

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Front end with bronze guide to take 1/4 inch hex insert bit holders (magnetic or non-magnetic) available on special order.

WITH QUICK-CHANGE CHUCK
TAKES 1/4-INCH HEX BITS, EXTENSION BIT-AND-FINDER UNITS, INSERT BIT HOLDERS, SOCKET ADAPTERS AND NUTSETTERS

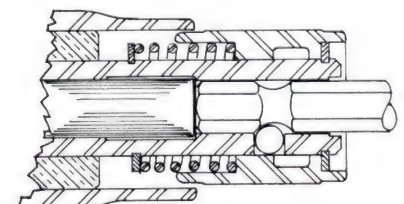
Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE							
835LN6-AT13	600	Dir. Dr.	80-160	2	8 5/8	1/2	1/4 - 5/8
835LN6-AT19	600	Positive	80-100	2 1/4	10 3/4	1/2	12-1/4
835LN6-AT24	600	Adjust.	20-50	2 3/8	10 3/4	1/2	8-12
835LN9-AT13	900	Dir. Dr.	60-120	2	8 5/8	1/2	12-1/4
835LN9-AT19	900	Positive	60-100	2 1/4	10 3/4	1/2	12-1/4
835LN9-AT24	900	Adjust.	20-50	2 3/8	10 3/4	1/2	8-12
835LN12-AT13	1200	Dir. Dr.	40-80	2	8 5/8	1/2	10-1/4
835LN12-AT19	1200	Positive	40-80	2 1/4	10 3/4	1/2	10-1/4
835LN12-AT24	1200	Adjust.	20-50	2 3/8	10 3/4	1/2	8-12
835LN24-AT13	2400	Dir. Dr.	20-40	7 1/8	7 15/16	1/2	8-10
835LN24-AT19	2400	Positive	20-40	8 15/16	10 1/8	1/2	8-10
835LN24-AT24-3	2400	Adjust.	5-25	8 15/16	10 1/8	1/2	4-10

835 LN6-AT13



QUICK CHANGE CHUCK

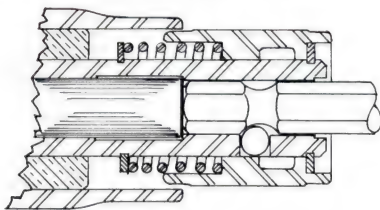
Generally used where bits or sockets are frequently changed.



Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Caution should be used in applying lever handle units with direct drive or positive clutch above 50 inch pounds because of high torque reaction to the operator. Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

Optional: No. 700060 Long Throttle Lever for Model 835 Screwdrivers and Nutsetters available on special order.



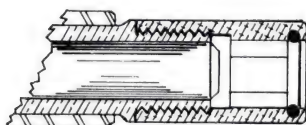
835 PN9-AT24-3

WITH QUICK-CHANGE CHUCK
TAKES 1/4-INCH HEX BITS, EXTENSION BIT-AND-FINDER UNITS,
INSERT BIT HOLDERS, SOCKET ADAPTERS AND NUTSETTERS

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
PISTOL GRIP							
835PN6-AT13	600	Dir. Dr.	80-160	2 3/8	6 15/16	1/2	1/4 - 5/8
835PN6-AT19	600	Positive	80-100	2 3/8	9 1/8	1/2	12 - 1/4
835PN6-AT24	600	Adjust.	20-50	2 3/4	9 1/8	1/2	8-12
835PN9-AT13	900	Dir. Dr.	60-120	2 3/8	6 15/16	1/2	12 - 1/4
835PN9-AT19	900	Positive	60-100	2 3/8	9 1/8	1/2	12 - 1/4
835PN9-AT24	900	Adjust.	20-50	2 3/4	9 1/8	1/2	8-12
835PN12-AT13	1200	Dir. Dr.	40-80	2 3/8	6 15/16	1/2	10 - 1/4
835PN12-AT19	1200	Positive	40-80	2 3/8	9 1/8	1/2	10 - 1/4
835PN12-AT24	1200	Adjust.	20-50	2 3/4	9 1/8	1/2	8-12
835PN24-AT13	2400	Dir. Dr.	20-40	2 1/8	6 1/4	1/2	8-10
835PN24-AT19	2400	Positive	20-40	2 3/8	8 3/8	1/2	8-10
835PN24-AT24-3	2400	Adjust.	5-25	2 1/2	8 3/8	1/2	4-10

WITH BUILT-IN, REPLACEABLE TIP MAGNETIC BIT HOLDERS
FOR 1/4-IN. INSERT BITS

NON-REVERSIBLE



835 LN6-AT61-1

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE							
835LN6-AT16-1	600	Dir. Dr.	80-160	2	9 1/2	1/4	1/4 - 5/8
835LN6-AT61-1	600	Positive	80-100	2 1/4	10 9/16	1/2	12 - 1/4
835LN6-AT62-6	600	Adjust.	20-50	2 3/8	10 9/16	1/2	8-12
835LN9-AT16-1	900	Dir. Dr.	60-120	2	9 1/2	1/4	12 - 1/4
835LN9-AT61-1	900	Positive	60-100	2 1/4	10 9/16	1/2	12 - 1/4
835LN9-AT62-6	900	Adjust.	20-50	2 3/8	10 9/16	1/2	8-12
835LN12-AT16-1	1200	Dir. Dr.	40-80	2	9 1/2	1/4	10 - 1/4
835LN12-AT61-1	1200	Positive	40-80	2 1/4	10 9/16	1/2	10 - 1/4
835LN12-AT62-6	1200	Adjust.	20-50	2 3/8	10 9/16	1/2	8-12
835LN24-AT16-1	2400	Dir. Dr.	20-40	1 3/4	8 13/16	1/4	8-10
835LN24-AT61-1	2400	Positive	20-40	2	9 7/8	1/2	8-10
835LN24-AT62-8	2400	Adjust.	5-25	2 1/8	9 7/8	1/2	4-10
PISTOL GRIP							
835PN6-AT16-1	600	Dir. Dr.	80-160	2 3/8	7 13/16	1/4	1/4 - 5/8
835PN6-AT61-1	600	Positive	80-100	2 3/8	8 7/8	1/2	12 - 1/4
835PN6-AT62-6	600	Adjust.	20-50	2 3/4	8 7/8	1/2	8-12
835PN9-AT16-1	900	Dir. Dr.	60-120	2 3/8	7 13/16	1/4	12 - 1/4
835PN9-AT61-1	900	Positive	60-100	2 3/8	8 7/8	1/2	12 - 1/4
835PN9-AT62-6	900	Adjust.	20-50	2 3/4	8 7/8	1/2	8-12
835PN12-AT16-1	1200	Dir. Dr.	40-80	2 3/8	7 13/16	1/4	10 - 1/4
835PN12-AT61-1	1200	Positive	40-80	2 3/8	8 7/8	1/2	10 - 1/4
835PN12-AT62-6	1200	Adjust.	20-50	2 3/4	8 7/8	1/2	8-12
835PN24-AT16-1	2400	Dir. Dr.	20-40	2 1/8	7 7/8	1/4	8-10
835PN24-AT61-1	2400	Positive	20-40	2 3/8	8 3/8	1/2	8-10
835PN24-AT62-8	2400	Adjust.	5-25	2 1/2	8 3/8	1/2	4-10



835 PN9-AT62-8

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Caution should be used in applying lever handle units with direct drive or positive clutch above 50 inch pounds because of high torque reaction to the operator.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

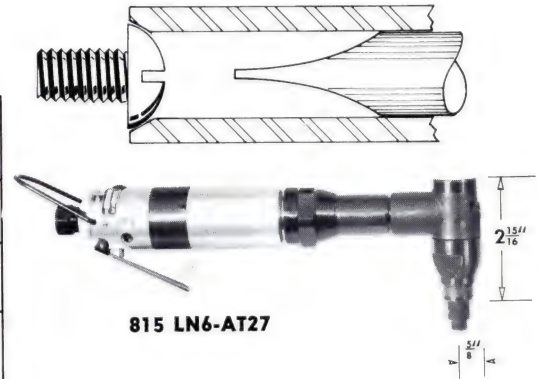
815 Series 90° Angle Screwdrivers

Master Power

WITH BUILT-IN FINDERS
NORMALLY USED FOR SLOTTED HEAD SCREWS

NON-REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
815LN6-AT27	600	Dir. Dr.	45-90	2 5/8	10 11/16	5/8	10-1/4
815LN6-AT44	600	Adjust.	20-50	2 3/4	10 11/16	5/8	8-12
815LN11-AT27	1100	Dir. Dr.	25-50	2 5/8	10 11/16	5/8	8-12
815LN11-AT44	1100	Adjust.	20-50	2 3/4	10 11/16	5/8	8-12
815LN18-AT27	1800	Dir. Dr.	12-25	2 3/8	9 7/8	5/8	6-10
815LN18-AT44-3	1800	Adjust.	5-25	2 1/2	9 7/8	5/8	4-10
REVERSIBLE							
815LR6-AT27	600	Dir. Dr.	45-90	2 5/8	10 11/16	5/8	10-1/4
815LR6-AT44	600	Adjust.	20-50	2 3/4	10 11/16	5/8	8-12
815LR11-AT27	1100	Dir. Dr.	25-50	2 5/8	10 11/16	5/8	8-12
815LR11-AT44	1100	Adjust.	20-50	2 3/4	10 11/16	5/8	8-12
815LR18-AT27	1800	Dir. Dr.	12-25	2 3/8	9 7/8	5/8	6-10
815LR18-AT44-3	1800	Adjust.	5-25	2 1/2	9 7/8	5/8	4-10



815 LN6-AT27



815 LR11-AT44

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

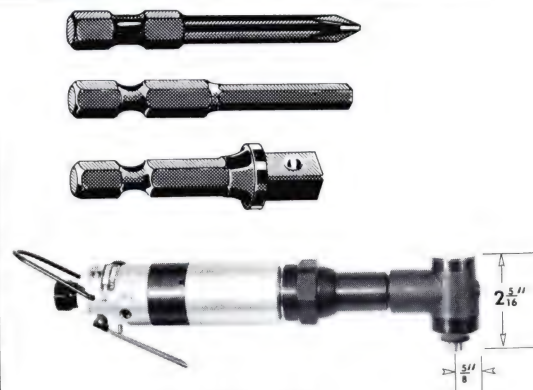
Bit (No. 719740) and non-magnetic finder (No. 719840) for 6F8R screw. Any other size furnished if specified. Magnetic finders available at extra cost.

815 Series 90° Angle Screwdrivers

WITH 1/4-INCH SNAP-IN HOLDER
FOR STANDARD 1/4-IN. HEX BITS AND SOCKET ADAPTERS

NON-REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
815LN6-AT28	600	Dir. Dr.	45-90	2 5/8	10 11/16	5/8	10-1/4
815LN6-AT45	600	Adjust.	20-50	2 3/4	10 11/16	5/8	8-12
815LN11-AT28	1100	Dir. Dr.	25-50	2 5/8	10 11/16	5/8	8-12
815LN11-AT45	1100	Adjust.	20-50	2 3/4	10 11/16	5/8	8-12
815LN18-AT28	1800	Dir. Dr.	12-25	2 3/8	9 7/8	5/8	6-10
815LN18-AT45-3	1800	Adjust.	5-25	2 1/2	9 7/8	5/8	4-10
REVERSIBLE							
Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
815LR6-AT28	600	Dir. Dr.	45-90	2 5/8	10 11/16	5/8	10-1/4
815LR6-AT45	600	Adjust.	20-50	2 3/4	10 11/16	5/8	8-12
815LR11-AT28	1100	Dir. Dr.	25-50	2 5/8	10 11/16	5/8	8-12
815LR11-AT45	1100	Adjust.	20-50	2 3/4	10 11/16	5/8	8-12
815LR18-AT28	1800	Dir. Dr.	12-25	2 3/8	9 7/8	5/8	6-10
815LR18-AT45-3	1800	Adjust.	5-25	2 1/2	9 7/8	5/8	4-10



815 LN11-AT28



815 LR11-AT45

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

Optional: No. 700060 Long Throttle Lever for Model 815 Screwdrivers and Nutsetters available on special order.

815 Series 90° Angle Screwdrivers

WITH BUILT-IN MAGNETIC BIT HOLDERS
FOR 1/4-INCH INSERT BITS

NON-REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE							
815LN6-AT30	600	Dir. Dr.	45-90	2 5/8	10 11/16	5/8	10-1/4
815LN6-AT47	600	Adjust.	20-50	2 3/4	10 11/16	5/8	8-12
815LN11-AT30	1100	Dir. Dr.	25-50	2 5/8	10 11/16	5/8	8-12
815LN11-AT47	1100	Adjust.	20-50	2 3/4	10 11/16	5/8	8-12
815LN18-AT30	1800	Dir. Dr.	12-25	2 5/8	9 7/8	5/8	6-10
815LN18-AT47-3	1800	Adjust.	5-25	2 1/2	9 7/8	5/8	4-10



815 LN6-AT30

REVERSIBLE

LEVER HANDLE							
815LR6-AT30	600	Dir. Dr.	45-90	2 5/8	10 11/16	5/8	10-1/4
815LR6-AT47	600	Adjust.	20-50	2 3/4	10 11/16	5/8	8-12
815LR11-AT30	1100	Dir. Dr.	25-50	2 5/8	10 11/16	5/8	8-12
815LR11-AT47	1100	Adjust.	25-50	2 3/4	10 11/16	5/8	8-12
815LR18-AT30	1800	Dir. Dr.	12-25	2 5/8	9 7/8	5/8	6-10
815LR18-AT47-3	1800	Adjust.	5-25	2 1/2	9 7/8	5/8	4-10



815 LR11-AT47

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

WITH BUILT-IN NON-MAGNETIC BIT HOLDERS FOR 1/4-INCH HEX INSERT BITS

NON-REVERSIBLE

Model No.	RPM	Clutch Type	Head	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE								
815LN6-AT29	600	Dir. Dr.	Std.	45-90	2 5/8	10 11/16	5/8	10-1/4
815LN6-AT46	600	Adjust.	Std.	20-50	2 3/4	10 11/16	5/8	8-12
815LN6-AT63	600	Adjust.	Small	20-50	2 5/8	10 1/2	7/16	8-12
815LN11-AT29	1100	Dir. Dr.	Std.	25-50	2 5/8	10 11/16	5/8	8-12
815LN11-AT46	1100	Adjust.	Std.	20-50	2 3/4	10 11/16	5/8	8-12
815LN11-AT53	1100	Dir. Dr.	Small	25-50	2 1/8	10 1/2	7/16	8-12
815LN11-AT63	1100	Adjust.	Small	20-50	2 5/8	10 1/2	7/16	8-12
815LN18-AT29	1800	Dir. Dr.	Std.	12-25	2 5/8	9 7/8	5/8	6-10
815LN18-AT46-3	1800	Adjust.	Std.	5-25	2 1/2	9 7/8	5/8	4-10
815LN18-AT53	1800	Dir. Dr.	Small	12-25	2	9 11/16	7/16	6-10
815LN18-AT63-3	1800	Adjust.	Small	5-25	2 1/8	9 11/16	7/16	4-10



815 LN6-AT29

REVERSIBLE

815LR6-AT29	600	Dir. Dr.	Std.	45-90	2 5/8	10 11/16	5/8	10-1/4
815LR6-AT46	600	Adjust.	Std.	20-50	2 3/4	10 11/16	5/8	8-12
815LR6-AT63	600	Adjust.	Small	20-50	2 5/8	10 1/2	7/16	8-12
815LR11-AT29	1100	Dir. Dr.	Std.	25-50	2 5/8	10 11/16	5/8	8-12
815LR11-AT46	1100	Adjust.	Std.	20-50	2 3/4	10 11/16	5/8	8-12
815LR11-AT53	1100	Dir. Dr.	Small	25-50	2 1/8	10 1/2	7/16	8-12
815LR11-AT63	1100	Adjust.	Small	20-50	2 5/8	10 1/2	7/16	8-12
815LR18-AT29	1800	Dir. Dr.	Std.	12-25	2 5/8	9 7/8	5/8	6-10
815LR18-AT46-3	1800	Adjust.	Std.	5-25	2 1/2	9 7/8	5/8	4-10
815LR18-AT53	1800	Dir. Dr.	Small	12-25	2	9 11/16	7/16	6-10
815LR18-AT63-3	1800	Adjust.	Small	5-25	2 1/8	9 11/16	7/16	4-10



815 LR11-AT53

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Screwdrivers with small heads are designed for close tolerance applications, and should not be used where torque exceeds 50 inch pounds.

815 Series 45° Angle Screwdrivers

Master Power

**WITH BUILT-IN NON-MAGNETIC BIT HOLDERS
FOR 1/4-INCH HEX INSERT BITS**

NON-REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE							
815LN6-AT65	600	Adjust.	20-50	2 3/8	10 3/8	1/2	8-12
815LN11-AT56	1100	Adjust.	25-50	2 1/8	10 3/8	1/2	8-12
815LN11-AT65	1100	Adjust.	20-50	2 3/8	10 3/8	1/2	8-12
815LN18-AT56	1800	Adjust.	12-25	2	9 9/16	1/2	6-10
815LN18-AT65-3	1800	Adjust.	5-25	2 1/8	9 9/16	1/2	4-10

REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE							
815LR6-AT65	600	Adjust.	20-50	2 3/8	10 3/8	1/2	8-12
815LR11-AT56	1100	Adjust.	25-50	2 1/8	10 3/8	1/2	8-12
815LR11-AT65	1100	Adjust.	20-50	2 3/8	10 3/8	1/2	8-12
815LR18-AT56	1800	Adjust.	12-25	2	9 9/16	1/2	6-10
815LR18-AT65-3	1800	Adjust.	5-25	2 1/8	9 9/16	1/2	4-10

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.



815 LN6-AT56



815 LR11-AT65

835 Series 90° Angle Screwdrivers

**WITH BUILT-IN FINDERS
NORMALLY USED FOR SLOTTED HEAD SCREWS**

NON-REVERSIBLE

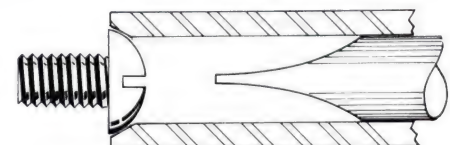
Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE							
835LN6-AT27	600	Dir. Dr.	80-160	2 7/8	11 7/16	5/8	1/4 - 5/8
835LN6-AT44	600	Adjust.	20-50	3	11 7/16	5/8	8-12
835LN9-AT27	900	Dir. Dr.	60-120	2 7/8	11 7/16	5/8	12-1/4
835LN9-AT44	900	Adjust.	20-50	3	11 7/16	5/8	8-12
835LN12-AT27	1200	Dir. Dr.	40-80	2 7/8	11 7/16	5/8	10-1/4
835LN12-AT44	1200	Adjust.	20-50	3	11 7/16	5/8	8-12
835LN24-AT27	2400	Dir. Dr.	20-40	2 5/8	10 3/4	5/8	8-10
835LN24-AT44-3	2400	Adjust.	5-25	2 3/4	10 3/4	5/8	4-10

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Bit (No. 719750) and non-magnetic finder (No. 719850) for 8F-10R screw. Any other size furnished if specified. Magnetic finders available at extra cost.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

Optional: No. 700060 Long Throttle Lever for Model 815 Screwdrivers and Nutsetters available on special order.



835 LN12-AT27

835 Series 90° Angle Screwdrivers



WITH 1/4-INCH SNAP-IN HOLDER
FOR STANDARD 1/4-INCH HEX BITS AND SOCKET ADAPTERS

NON-REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
835LN6-AT28 835LN6-AT45	600 600	Dir. Dr. Adjust.	80-160 20-50	2 7/8 3	11 7/16 11 7/16	5/8 5/8	1/4 - 5/16 8-12
835LN9-AT28 835LN9-AT45	900 900	Dir. Dr. Adjust.	60-120 20-50	2 7/8 3	11 7/16 11 7/16	5/8 5/8	12-1/4 8-12
835LN12-AT28 835LN12-AT45	1200 1200	Dir. Dr. Adjust.	40-80 20-50	2 7/8 3	11 7/16 11 7/16	5/8 5/8	10-1/4 8-12
835LN24-AT28 835LN24-AT45-3	2400 2400	Dir. Dr. Adjust.	20-40 5-25	2 3/4 2 3/4	10 3/4 10 3/4	5/8 5/8	8-10 4-10



Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

835 Series 90° Angle Screwdrivers



WITH BUILT-IN MAGNETIC BIT HOLDERS
FOR 1/4-INCH HEX INSERT BITS

NON-REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE							
835LN6-AT30 835LN6-AT47	600 600	Dir. Dr. Adjust.	80-160 20-50	2 7/8 3	11 7/16 11 7/16	5/8 5/8	1/4 - 5/16 8-12
835LN9-AT30 835LN9-AT47	900 900	Dir. Dr. Adjust.	60-120 20-50	2 7/8 3	11 7/16 11 7/16	5/8 5/8	12-1/4 8-12
835LN12-AT30 835LN12-AT47	1200 1200	Dir. Dr. Adjust.	40-80 20-50	2 7/8 3	11 7/16 11 7/16	5/8 5/8	10-1/4 8-12
835LN24-AT30 835LN24-AT47-3	2400 2400	Dir. Dr. Adjust.	20-40 5-25	2 3/4 2 3/4	10 3/4 10 3/4	5/8 5/8	8-10 4-10

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

835 Series 90° Screwdrivers

Master Power



NON-REVERSIBLE

Model No.	RPM	Clutch Type	Head	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
835LN6-AT29	600	Dir. Dr.	Std.	80-160	2 7/8	11 7/8	5/8	1/4 - 5/8
835LN6-AT46	600	Adjust.	Std.	20-50	3	11 7/8	5/8	8-12
835LN6-AT63	600	Adjust.	Small	20-50	2 1/2	11 1/4	7/8	8-12
835LN9-AT29	900	Dir. Dr.	Std.	60-120	2 7/8	11 7/8	5/8	12-1/4
835LN9-AT46	900	Adjust.	Std.	20-50	3	11 7/8	5/8	8-12
835LN9-AT63	900	Adjust.	Small	20-50	2 1/2	11 1/4	7/8	8-12
835LN12-AT29	1200	Dir. Dr.	Std.	40-80	2 7/8	11 7/8	5/8	10-1/4
835LN12-AT46	1200	Adjust.	Std.	20-50	3	11 7/8	5/8	8-12
835LN12-AT63	1200	Adjust.	Small	20-50	2 1/2	11 1/4	7/8	8-12
835LN24-AT29	2400	Dir. Dr.	Std.	20-40	2 3/8	10 3/4	5/8	8-10
835LN24-AT46-3	2400	Adjust.	Std.	5-25	2 3/4	10 3/4	5/8	4-10
835LN24-AT53	2400	Dir. Dr.	Small	20-40	2 1/8	10 9/16	7/8	8-10
835LN24-AT63-3	2400	Adjust.	Small	5-25	2 1/4	10 9/16	7/8	4-10

**WITH BUILT-IN
NON-MAGNETIC
BIT HOLDERS**

FOR 1/4-INCH HEX INSERT BITS



Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

Screwdrivers with small heads are designed for close tolerance applications, and should not be used where torque exceeds 50 inch pounds.

835 Series 45° Angle Screwdrivers



**WITH BUILT-IN NON-MAGNETIC BIT HOLDERS
FOR 1/4-INCH HEX INSERT BITS**

NON-REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
835LN6-AT65	600	Adjust.	20-50	2 1/2	11 1/4	7/8	8-12
835LN9-AT65	900	Adjust.	20-50	2 1/2	11 1/4	7/8	8-12
835LN12-AT65	1200	Adjust.	20-50	2 1/2	11 1/4	7/8	8-12
835LN24-AT56	2400	Dir. Dr.	20-40	2 3/8	10 9/16	7/8	8-10
835LN24-AT65-3	2400	Adjust.	5-25	2 1/4	10 9/16	7/8	4-10

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

Selection data, having to do with clutches, torque characteristics, and analysis of fastener applications which has been detailed on pages 4 and 5, apply as well to Master Power nut runners.

The following pages illustrate typical nut running tools in pistol grip and lever throttle styles, straight and angle types, standard and small head versions, and well over two hundred models are described in the specification tables.

Socket manufacturers, keeping pace with specialized industrial needs, produce a tremendously wide variety of sockets

over and above the standard hex and square nut types. Most of that comprehensive range of sockets and adapters can be used with Master Power tools to suit your nut running requirements.

Catalogs published by these manufacturers are usually available upon request and should be a part of your threaded fastener reference library. Specific information on dimensions, sizes and types can be readily furnished by your Master Power distributor.

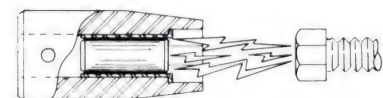
When ordering sockets always specify type, and across-the-flat dimensions of both female openings.



NOTE: Always specify
1/4" or 3/8" square drive

While Master Power Screwdrivers and Nutsetters have complete interchangeability of motor units and driving attachments (any AT listed will fit all 815 and 835 series motors) you will note that the driving attachments are designed and built as an integral unit for the purpose intended. That is, a Master Power Nutsetter is not a makeshift tool, using adapters to change a screwdriver to a nutsetter. It is designed and produced as a nutsetter with its own, built-in 1/4" or 3/8" square drive.

Standard nut sockets are available in various lengths and wall thicknesses, generally classified as short • standard length • long • extra long • standard wall • thin wall • extra thin wall.



MOST STANDARD SOCKETS CAN BE FURNISHED IN MAGNETIC TYPE



STRAIGHT



TAPERED



SHOULDER



Universal Socket
Extension
Type



Female Square
Service Drive
Bits



Drivers For
Socket Screws,
Pipe Plugs



Universal Socket
Adapter



Standard
Universal
Sockets

815 Series Nutrunners

Master Power

WITH 1/4-IN. AND 3/8-IN. SQUARE DRIVE

REVERSIBLE

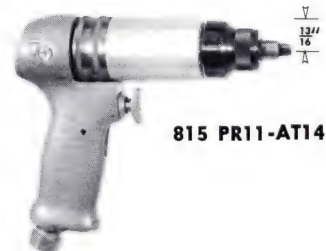
MODEL No.		RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Mach. Screw Size
1/4-In. Sq. Drive	3/8-In. Sq. Drive						
LEVER HANDLE							
815LR6-AT14	815LR6-AT15	600	Dir. Dr.	45-90	1 5/8	7 1/8	10-1/4
815LR6-AT20	815LR6-AT21	600	Positive	45-90	2	8 3/4	10-1/4
815LR6-AT25	815LR6-AT26	600	Adjust.	20-50	2 1/8	8 3/4	8-12
815LR11-AT14	815LR11-AT15	1100	Dir. Dr.	25-50	1 5/8	7 1/8	8-12
815LR11-AT20	815LR11-AT21	1100	Positive	25-50	2	8 3/4	8-12
815LR11-AT25	815LR11-AT26	1100	Adjust.	20-50	2 1/8	8 3/4	8-12
815LR18-AT14	815LR18-AT15	1800	Dir. Dr.	12-25	1 3/8	6 1/4	6-8
815LR18-AT20	815LR18-AT21	1800	Positive	12-25	1 3/4	7 15/16	6-8
815LR18-AT25-3	815LR18-AT26-3	1800	Adjust.	5-25	1 7/8	7 15/16	4-8
PISTOL GRIP							
815PR6-AT14	815PR6-AT15	600	Dir. Dr.	45-90	2 1/8	6 3/8	10-1/4
815PR6-AT20	815PR6-AT21	600	Positive	45-90	2 1/2	8	10-1/4
815PR6-AT25	815PR6-AT26	600	Adjust.	20-50	2 5/8	8	8-12
815PR11-AT14	815PR11-AT15	1100	Dir. Dr.	25-50	2 1/8	6 3/8	8-12
815PR11-AT20	815PR11-AT21	1100	Positive	25-50	2 1/2	8	8-12
815PR11-AT25	815PR11-AT26	1100	Dir. Dr.	25-50	2 5/8	8	8-12
815PR18-AT14	815PR18-AT15	1800	Dir. Dr.	12-25	1 5/8	6 1/4	6-8
815PR18-AT20	815PR18-AT21	1800	Positive	12-25	2 1/8	8 1/8	6-8
815PR18-AT25-3	815PR18-AT26-3	1800	Adjust.	5-25	2 1/4	8 1/8	4-8



815 LR6-AT25



815 PR11-AT14



NON-REVERSIBLE

MODEL No.		RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Mach. Screw Size
1/4-In. Sq. Drive	3/8-In. Sq. Drive						
LEVER HANDLE							
815LN6-AT14	815LN6-AT15	600	Dir. Dr.	45-90	1 5/8	7 1/8	10-1/4
815LN6-AT20	815LN6-AT21	600	Positive	45-90	2	8 3/4	10-1/4
815LN6-AT25	815LN6-AT26	600	Adjust.	20-50	2 1/8	8 3/4	8-12
815LN11-AT14	815LN11-AT15	1100	Dir. Dr.	25-50	1 5/8	7 1/8	8-12
815LN11-AT20	815LN11-AT21	1100	Positive	25-50	2	8 3/4	8-12
815LN11-AT25	815LN11-AT26	1100	Adjust.	20-50	2 1/8	8 3/4	8-12
815LN18-AT14	815LN18-AT15	1800	Dir. Dr.	12-25	1 3/8	6 1/4	6-8
815LN18-AT20	815LN18-AT21	1800	Positive	12-25	1 3/4	7 15/16	6-8
815LN18-AT25-3	815LN18-AT26-3	1800	Adjust.	5-25	1 7/8	7 15/16	4-8
PISTOL GRIP							
815PN6-AT14	815PN6-AT15	600	Dir. Dr.	45-90	2 1/8	6 3/8	10-1/4
815PN6-AT20	815PN6-AT21	600	Positive	45-90	2 1/2	8	10-1/4
815PN6-AT25	815PN6-AT26	600	Adjust.	20-50	2 5/8	8	8-12
815PN11-AT14	815PN11-AT15	1100	Dir. Dr.	25-50	2 1/8	6 3/8	8-12
815PN11-AT20	815PN11-AT21	1100	Positive	25-50	2 1/2	8	8-12
815PN11-AT25	815PN11-AT26	1100	Adjust.	20-50	2 5/8	8	8-12
815PN18-AT14	815PN18-AT15	1800	Dir. Dr.	12-25	1 5/8	6 1/4	6-8
815PN18-AT20	815PN18-AT21	1800	Positive	12-25	2 1/8	8 1/8	6-8
815PN18-AT25-3	815PN18-AT26-3	1800	Adjust.	5-25	2 1/4	8 1/8	4-8



815 LN6-AT14



815 PN11-AT20

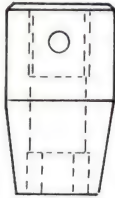
Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Caution should be used in applying lever handle units with direct drive or positive clutch above 50 inch pounds because of high torque reaction to the operator.

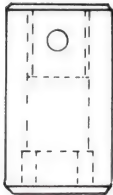
Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

WITH 1/4-IN. AND 3/8-IN. SQUARE DRIVE

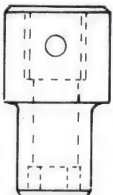
SOCKET TYPES



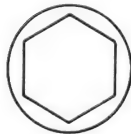
TAPERED



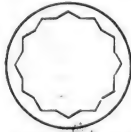
STRAIGHT



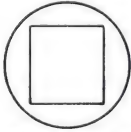
SHOULDER



SINGLE HEX



DOUBLE HEX



SINGLE SQUARE



DOUBLE SQUARE



FAST LEAD



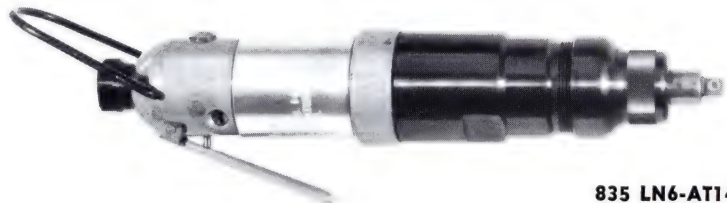
SURFACE DRIVE

NON-REVERSIBLE

MODEL No.		RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
1/4-In. Sq. Drive	3/8-In. Sq. Drive							
LEVER HANDLE								
835LN6-AT14	835LN6-AT15	600	Dir. Dr.	80-160	2	7 1/8	1/2	1/4 - 5/16
835LN6-AT20	835LN6-AT21	600	Positive	80-100	2 1/4	9 5/8	1/2	12-1/4
835LN6-AT25	835LN6-AT26	600	Adjust.	20-50	2 3/8	9 5/8	1/2	8-12
835LN9-AT14	835LN9-AT15	900	Dir. Dr.	60-120	2	7 1/8	1/2	12-1/4
835LN9-AT20	835LN9-AT21	900	Positive	60-100	2 1/4	9 5/8	1/2	12-1/4
835LN9-AT25	835LN9-AT26	900	Adjust.	20-50	2 3/8	9 5/8	1/2	8-12
835LN12-AT14	835LN12-AT15	1200	Dir. Dr.	40-80	2	7 1/8	1/2	10-1/4
835LN12-AT20	835LN12-AT21	1200	Positive	40-80	2 1/4	9 5/8	1/2	10-1/4
835LN12-AT25	835LN12-AT26	1200	Adjust.	20-50	2 3/8	9 5/8	1/2	8-12
835LN24-AT14	835LN24-AT15	2400	Dir. Dr.	20-40	1 3/4	7 1/8	1/2	8-10
835LN24-AT20	835LN24-AT21	2400	Positive	20-40	2	8 15/16	1/2	8-10
835LN24-AT25-3	835LN24-AT26-3	2400	Adjust.	5-25	2 1/8	8 15/16	1/2	4-10



835 PN9-AT21



835 LN6-AT14

NON-REVERSIBLE

MODEL No.		RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
1/4-In. Sq. Drive	3/8-In. Sq. Drive							
PISTOL GRIP								
835PN6-AT14	835PN6-AT15	600	Dir. Dr.	80-160	2 3/8	6 1/8	1/2	1/4 - 5/16
835PN6-AT20	835PN6-AT21	600	Positive	80-100	2 3/8	7 15/16	1/2	12-1/4
835PN6-AT25	835PN6-AT26	600	Adjust.	20-50	2 3/4	7 15/16	1/2	8-12
835PN9-AT14	835PN9-AT15	900	Dir. Dr.	60-120	2 3/8	6 1/8	1/2	12-1/4
835PN9-AT20	835PN9-AT21	900	Positive	60-100	2 3/8	7 15/16	1/2	12-1/4
835PN9-AT25	835PN9-AT26	900	Adjust.	20-50	2 3/4	7 15/16	1/2	8-12
835PN12-AT14	835PN12-AT15	1200	Dir. Dr.	40-80	2 3/8	6 1/8	1/2	10-1/4
835PN12-AT20	835PN12-AT21	1200	Positive	40-80	2 3/8	7 15/16	1/2	10-1/4
835PN12-AT25	835PN12-AT26	1200	Adjust.	20-50	2 3/4	7 15/16	1/2	8-12
835PN24-AT14	835PN24-AT15	2400	Dir. Dr.	20-40	2 1/8	5 17/8	1/2	8-10
835PN24-AT20	835PN24-AT21	2400	Positive	20-40	2 3/8	7 1/4	1/2	8-10
835PN24-AT25-3	835PN24-AT26-3	2400	Adjust.	5-25	2 1/2	7 1/4	1/2	4-10

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Caution should be used in applying lever handle units with direct drive or positive clutch above 50 inch pounds because of high torque reaction to the operator.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

815 Series 90° Angle Nutrunners

Master Power

WITH 1/4-IN. AND 3/8-IN. SQUARE DRIVE



815 LN11-AT31



815 LN11-AT64



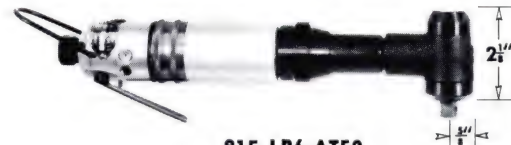
815 LN6-AT34

NON-REVERSIBLE

MODEL No.		RPM	Clutch Type	Head	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
1/4-In. Sq. Drive	3/8-In. Sq. Drive								
SINGLE END									
815LN6-AT31	815LN6-AT33	600	Dir. Dr.	Std.	45-90	2 3/8	10 11/16	5/8	10-1/4
815LN6-AT48	815LN6-AT50	600	Adjust.	Std.	20-50	2 3/4	10 11/16	5/8	8-12
815LN6-AT64	_____	600	Adjust.	Small	20-50	2 3/8	10 1/2	7/16	8-12
815LN11-AT31	815LN11-AT33	1100	Dir. Dr.	Std.	25-50	2 3/8	10 11/16	5/8	8-12
815LN11-AT48	815LN11-AT50	1100	Adjust.	Std.	20-50	2 3/4	10 11/16	5/8	8-12
815LN11-AT54	_____	1100	Dir. Dr.	Small	20-50	2 1/4	10 1/2	7/16	8-12
815LN11-AT64	_____	1100	Adjust.	Small	20-50	2 1/4	10 1/2	7/16	8-12
815LN18-AT31	815LN18-AT33	1800	Dir. Dr.	Std.	12-25	2 3/8	9 7/8	5/8	6-10
815LN18-AT48-3	815LN18-AT50	1800	Adjust.	Std.	5-25	2 1/2	9 7/8	5/8	4-10
815LN18-AT54	_____	1800	Dir. Dr.	Small	12-25	2	9 11/16	7/16	6-10
815LN18-AT64-3	_____	1800	Adjust.	Small	5-25	2 1/8	9 11/16	7/16	4-10
DOUBLE END									
815LN6-AT32	815LN6-AT34	600	Dir. Dr.	Std.	45-90	2 3/8	10 11/16	5/8	10-1/4
815LN6-AT49	815LN6-AT51	600	Adjust.	Std.	20-50	2 3/4	10 11/16	5/8	8-12
815LN11-AT32	815LN11-AT34	1100	Dir. Dr.	Std.	25-50	2 3/8	10 11/16	5/8	8-12
815LN11-AT49	815LN11-AT51	1100	Adjust.	Std.	20-50	2 3/4	10 11/16	5/8	8-12
815LN18-AT32	815LN18-AT34	1800	Dir. Dr.	Std.	12-25	2 3/8	9 7/8	5/8	6-10
815LN18-AT49-3	815LN18-AT51-3	1800	Adjust.	Std.	5-25	2 1/2	9 7/8	5/8	4-10



815 LR6-AT54



815 LR6-AT50

REVERSIBLE

MODEL No.		RPM	Clutch Type	Head	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
¼-In. Sq. Drive	⅜-In. Sq. Drive								
SINGLE END									
815LR6-AT31	815LR6-AT33	600	Dir. Dr.	Std.	45-90	2 ⅝	10 11⁄16	⅝	10- ¼
815LR6-AT48	815LR6-AT50	600	Adjust.	Std.	20-50	2 ¾	10 11⁄16	⅝	8-12
815LR6-AT64	_____	600	Adjust.	Small	20-50	2 ⅝	10 ½	7⁄16	8-12
815LR11-AT31	815LR11-AT33	1100	Dir. Dr.	Std.	25-50	2 ⅝	10 11⁄16	⅝	8-12
815LR11-AT48	815LR11-AT50	1100	Adjust.	Std.	20-50	2 ¾	10 11⁄16	⅝	8-12
815LR11-AT54	_____	1100	Dir. Dr.	Small	25-50	2 ⅞	10 ½	7⁄16	8-12
815LR11-AT64	_____	1100	Adjust.	Small	20-50	2 ¼	10 ½	7⁄16	8-12
815LR18-AT31	815LR18-AT33	1800	Dir. Dr.	Std.	12-25	2 ⅝	9 ⅞	⅝	6-10
815LR18-AT48	815LR18-AT50	1800	Adjust.	Std.	5-25	2 ½	9 ⅞	⅝	4-10
815LR18-AT54	_____	1800	Dir. Dr.	Small	12-25	2	9 11⁄16	7⁄16	6-10
815LR18-AT64-3	_____	1800	Adjust.	Small	5-25	2 ⅞	9 11⁄16	7⁄16	4-10

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

Nutrunners with small heads are designed for close tolerance applications, and should not be used where torque exceeds 50 inch pounds.

WITH 1/4-IN. AND 3/8-IN. SQUARE DRIVE



835 LN6-AT64



835 LN6-AT33



NON-REVERSIBLE

MODEL No.		RPM	Clutch Type	Head	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
1/4-In. Sq. Drive	3/8-In. Sq. Drive								
SINGLE END									
835LN6-AT31	835LN6-AT33	600	Dir. Dr.	Std.	80-160	2 7/8	11 7/8	5/8	1/4 - 5/8
835LN6-AT48	835LN6-AT50	600	Adjust.	Std.	20-50	3	11 7/8	5/8	8-12
835LN6-AT64		600	Adjust.	Small	20-50	2 1/2	11 1/4	7/8	8-12
835LN9-AT31	835LN9-AT33	900	Dir. Dr.	Std.	60-120	2 7/8	11 7/8	5/8	12-1/4
835LN9-AT48	835LN9-AT50	900	Adjust.	Std.	20-50	3	11 7/8	5/8	8-12
835LN9-AT64		900	Adjust.	Small	20-50	2 1/2	11 1/4	7/8	8-12
835LN12-AT31	835LN12-AT33	1200	Dir. Dr.	Std.	40-80	2 7/8	11 7/8	5/8	10-1/4
835LN12-AT48	835LN12-AT50	1200	Adjust.	Std.	20-50	3	11 7/8	5/8	8-12
835LN12-AT64		1200	Adjust.	Small	20-50	2 1/2	11 1/4	7/8	8-12
835LN24-AT31	835LN24-AT33	2400	Dir. Dr.	Std.	20-40	2 5/8	10 3/4	5/8	8-10
835LN24-AT48-3	835LN24-AT50	2400	Adjust.	Std.	5-25	2 3/4	10 3/4	5/8	4-10
835LN24-AT54		2400	Dir. Dr.	Small	20-40	2 1/8	10 9/16	7/8	8-10
835LN24-AT64-3		2400	Adjust.	Small	5-25	2 1/4	10 9/16	7/8	4-10
DOUBLE END									
835LN6-AT32	835LN6-AT34	600	Dir. Dr.	Std.	80-160	2 7/8	11 7/8	5/8	1/4 - 5/8
835LN6-AT49	835LN6-AT51	600	Adjust.	Std.	20-50	3	11 7/8	5/8	8-12
835LN9-AT32	835LN9-AT34	900	Dir. Dr.	Std.	60-120	2 7/8	11 7/8	5/8	12-1/4
835LN9-AT49	835LN9-AT51	900	Adjust.	Std.	20-50	3	11 7/8	5/8	8-12
835LN12-AT32	835LN12-AT34	1200	Dir. Dr.	Std.	40-80	2 7/8	11 7/8	5/8	10-1/4
835LN12-AT49	835LN12-AT51	1200	Adjust.	Std.	20-50	3	11 7/8	5/8	8-12
835LN24-AT32	835LN24-AT34	2400	Dir. Dr.	Std.	20-40	2 7/8	10 3/4	5/8	8-10
835LN24-AT49-3	835LN24-AT51-3	2400	Adjust.	Std.	5-25	3	10 3/4	5/8	4-10

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

Nutrunners with small heads are designed for close tolerance applications, and should not be used where torque exceeds 50 inch pounds.



835 LN12-AT32

835 LN12-AT34



815 Series 45° Angle Nutrunner

Master Power

WITH 1/4-INCH SQUARE DRIVE

NON-REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
815LN6-AT66	600	Adjust.	20-50	2 3/8	10 3/8	1/2	8-12
815LN11-AT57	1100	Dir. Dr.	25-50	2 1/8	10 3/8	1/2	8-12
815LN11-AT66	1100	Adjust.	20-50	2 3/8	10 3/8	1/2	8-12
815LN18-AT57	1800	Dir. Dr.	12-25	2	9 7/8	1/2	6-10
815LN18-AT66-3	1800	Adjust.	5-25	2 1/8	9 7/8	1/2	4-10

REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
815LR6-AT66	600	Adjust.	20-50	2 3/8	10 3/8	1/2	8-12
815LR11-AT57	1100	Dir. Dr.	25-50	2 1/8	10 3/8	1/2	8-12
815LR11-AT66	1100	Adjust.	20-50	2 3/8	10 3/8	1/2	8-12
815LR18-AT57	1800	Dir. Dr.	12-25	2	9 7/8	1/2	6-10
815LR18-AT66-3	1800	Adjust.	5-25	2 1/8	9 7/8	1/2	4-10

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

Nutrunners with small heads are designed for close tolerance applications, and should not be used where torque exceeds 50 inch pounds.



815 LN11-AT57



815 LR11-AT66

835 Series 45° Angle Nutrunner

WITH 1/4-INCH SQUARE DRIVE

NON-REVERSIBLE

Model No.	RPM	Clutch Type	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
835LN6-AT66	600	Adjust.	20-50	2 1/2	11 1/4	7/16	8-12
835LN9-AT66	900	Adjust.	20-50	2 1/2	11 1/4	7/16	8-12
835LN12-AT66	1200	Adjust.	20-50	2 1/2	11 1/4	7/16	8-12
835LN24-AT57	2400	Dir. Dr.	20-40	2 1/8	10 3/8	7/16	8-10
835LN24-AT66-3	2400	Adjust.	5-25	2 1/4	10 3/8	7/16	4-10

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.

Screwdrivers and nutsetters at 1800 RPM and over have 45° clutch jaws. All lower speeds have 25° clutch jaws.

Nutrunners with small heads are designed for close tolerance applications, and should not be used where torque exceeds 50 inch pounds.

Optional: No. 700060 Long Throttle Lever for Model 815 Screwdrivers and Nutsetters available on special order.



835 LN12-AT66

811 Series Screwdrivers/Nutrunners

AUTOMATIC TORQUE-LIMITING CLUTCH

WITH SNAP-IN SOCKET FOR 1/4-INCH HEX BITS AND ADAPTERS

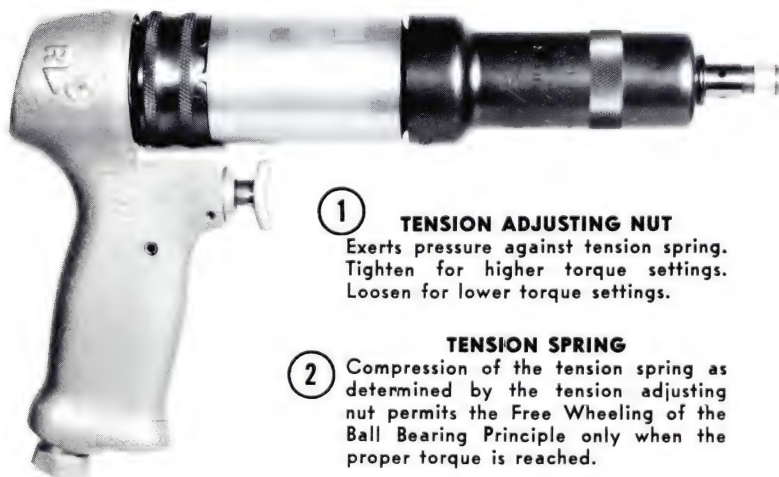
NON-REVERSIBLE

Model No.	RPM	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE						
811LN6-AT70	600	2-25	2 1/4	10 1/4	9/16	2-8
811LN6-AT71	600	15-85	2 3/4	11 1/8	1 1/8	8-1/4
811LN11-AT70	1100	2-25	2 1/4	10 1/4	9/16	2-8
811LN11-AT71	1100	15-50	2 3/4	11 1/8	1 1/8	8-12
811LN18-AT70	1800	2-25	1 3/4	9 9/16	9/16	2-8
PISTOL GRIP						
811PN6-AT70	600	2-25	2 3/4	9 3/4	9/16	2-8
811PN6-AT71	600	15-85	2 3/4	10 3/8	1 1/8	8-1/4
811PN11-AT70	1100	2-25	2 3/4	9 3/4	9/16	2-8
811PN11-AT71	1100	15-50	2 3/4	10 3/8	1 1/8	8-12
811PN18-AT70	1800	2-25	2 3/4	8 7/8	9/16	2-8
REVERSIBLE						
LEVER HANDLE						
811LR6-AT70	600	2-25	2 1/4	10 1/4	9/16	2-8
811LR6-AT71	600	15-85	2 3/4	11 1/8	1 1/8	8-1/4
811LR11-AT70	1100	2-25	2 1/4	10 1/4	9/16	2-8
811LR11-AT71	1100	15-50	2 3/4	11 1/8	1 1/8	8-12
811LR18-AT70	1800	2-25	1 3/4	9 9/16	9/16	2-8
PISTOL GRIP						
811PR6-AT70	600	2-25	2 3/4	9 3/4	9/16	2-8
811PR6-AT71	600	15-85	2 3/4	10 3/8	1 1/8	8-1/4
811PR11-AT70	1100	2-25	2 3/4	9 3/4	9/16	2-8
811PR11-AT71	1100	15-50	2 3/4	10 3/8	1 1/8	8-12
811PR18-AT70	1800	2-25	2 3/4	8 9/16	9/16	2-8



811 LR6-AT70

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.



811 PR6-AT70

- ① **TENSION ADJUSTING NUT**
Exerts pressure against tension spring. Tighten for higher torque settings. Loosen for lower torque settings.

- ② **TENSION SPRING**
Compression of the tension spring as determined by the tension adjusting nut permits the Free Wheeling of the Ball Bearing Principle only when the proper torque is reached.

③ **FRictionless BALL BEARING PRINCIPLE**

Once predetermined torque is reached ball bearings go into "free wheeling", and do not permit clutch to ratchet or continue to turn the bit or socket regardless of how long the driving motor operates.

Releases for next operation only when tool is removed from the work.

- ④ **DRIVING JAWS**
Engage only when pressure is provided by operator. Should operator pressure be relaxed, negative angle jaws remain engaged. They disengage only when removed from work.

- ⑤ **HEX FEMALE SHANK RETAINER**
Will receive all standard 1/4" hex shank bits and adapters as shown on opposite page.



831 Series Screwdrivers/Nutrunners

Master Power

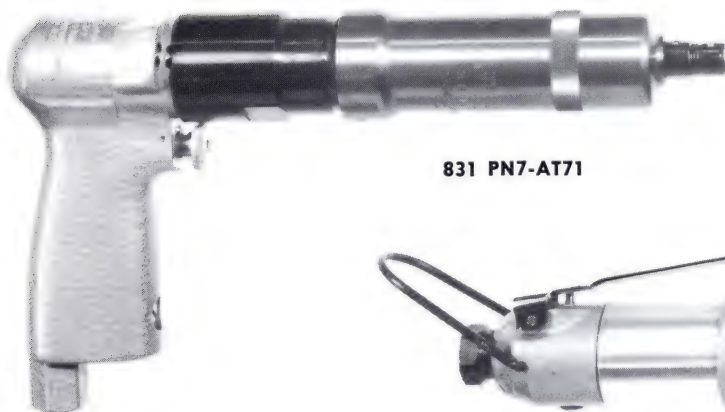
AUTOMATIC TORQUE-LIMITING CLUTCH

WITH SNAP-IN SOCKET FOR 1/4-INCH HEX BITS AND ADAPTERS

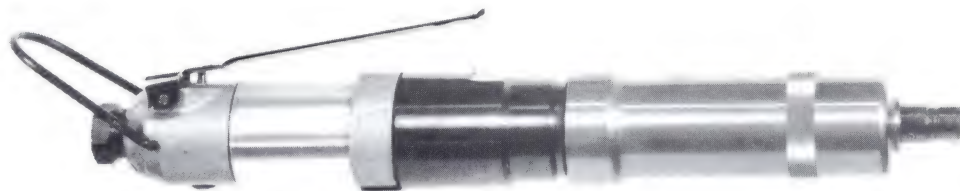
NON-REVERSIBLE

Model No.	RPM	Torque Range In. - Lb.	Weight Lb.	Overall Length In.	Side to Center In.	Mach. Screw Size
LEVER HANDLE						
831LN7-AT71	700	15-85	2 5/8	11 13/16	1 1/16	8-1/4
831LN10-AT71	1000	15-85	2 5/8	11 13/16	1 1/16	8-1/4
831LN13-AT71	1300	15-80	2 5/8	11 13/16	1 1/16	8-1/4
PISTOL GRIP						
831PN7-AT71	700	15-85	2 7/8	10 1/8	1 1/16	8-1/4
831PN10-AT71	1000	15-85	2 7/8	10 1/8	1 1/16	8-1/4
831PN13-AT71	1300	15-80	2 7/8	10 1/8	1 1/16	8-1/4

Standard Equipment: 1/4 inch FPT inlet. Built-in air regulator. Suspension bail (Number 500-29) on all lever handle units. One 815-173 open end wrench.



831 PN7-AT71



831 LN7-AT71

ALL OF THE STANDARD 1/4" HEX SHANK BITS AND ADAPTERS ILLUSTRATED BELOW CAN BE USED WITH MASTER POWER TORQUE LIMITERS

see Pages 24 and 25

BITS FOR

PHILLIPS

FREARSON

SLOTTED

CLUTCH HEAD

SOCKET HEAD SCREWS



Standard Type Slotted Screwdriver Bit complete with Finder Sleeve.



1/4 INCH HEX SHANK BITS AND FINDERS FOR SLOTTED HEAD SCREWS





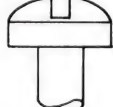
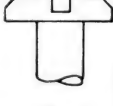


Magnetic Finder



Non-Magnetic Finder



Standard 1/4" Hex Bit

Screw Type	Screw Size	Non-Magnetic		Magnetic	
		Finder	Bit	Finder	Bit
 Flat or Oval	# 2	719800	719700	—	—
	# 3	719810	719710	719100	719710
	# 4	719820	719720	719110	719720
	# 5	719830	719730	719120	719720
	# 6	719840	719740	719130	719730
	# 8	719850	719750	719140	719740
	# 10	719860	719760	719150	719750
	# 12	719870	719770	719160	719760
	1/4	—	—	719160	719760
 Round	# 2	719800	719700	—	—
	# 3	719810	719710	—	—
	# 4	719810	719710	719200	719710
	# 5	719820	719720	719210	719720
	# 6	719830	719730	719220	719730
	# 8	719840	719740	719230	719740
	# 10	719850	719750	719240	719760
	# 12	719860	719760	719250	719760
	1/4	719870	719770	719260	719760
 Fillister	# 2	—	—	—	—
	# 3	719800	719700	—	—
	# 4	719810	719710	719200	719710
	# 5	719810	719710	719300	719710
	# 6	719820	719720	719310	719720
	# 8	719830	719730	719320	719730
	# 10	719850	719750	719330	719740
	# 12	719860	719760	719340	719760
	1/4	719870	719770	719350	719760
 Pan	# 2	719800	719700	—	—
	# 3	719800	719700	719370	719710
	# 4	719810	719710	719380	719720
	# 5	719820	719720	719390	719720
	# 6	719830	719730	719400	719730
	# 8	719840	719740	719410	719740
	# 10	719860	719760	719420	719760
	# 12	719870	719770	719430	719760
	1/4	—	—	719440	719760
 Binding	# 2	719800	719700	—	—
	# 3	719800	719700	719460	719710
	# 4	719810	719710	719470	719720
	# 5	719820	719720	719480	719730
	# 6	719830	719730	719490	719740
	# 8	719850	719750	719500	719740
	# 10	719860	719760	719510	719760
	# 12	719870	719770	719520	719760
	1/4	—	—	719530	719760
 Truss	# 2	719800	719700	—	—
	# 3	719810	719710	719550	719720
	# 4	719820	719720	719560	719730
	# 5	719830	719730	719570	719730
	# 6	719840	719740	719580	719740
	# 8	719860	719760	719590	719760
	# 10	719870	719770	719600	719760
	# 12	—	—	719610	719760
	1/4	—	—	719620	719760

1/4-INCH HEX SHANK BIT AND FINDER ASSEMBLIES FOR SLOTTED SCREWS



1/4" Hex Shank Extension Bit & Finder Unit.

Screw Size	Part No.	Length Inches
4-5	17690	2 3/4
4-5	22111	5 1/4
6-7-8	13356	2 3/4
6-7-8	13469	5 1/4
9-10	18593	2 3/4
12-1/4"	21731	2 3/4

1/4 INCH HEX INSERT BITS AND BIT HOLDERS




NON-MAGNETIC HOLDER

No. 719778


MAGNETIC BIT HOLDER

No. 38426



Screw Type	Size	Bit No.
Slotted Head 	6	38407
	8	38408
	10	38409
	12	38410
	1/4	38411




Phillips		1	38403
		2	38404
		3	38405





Reed & Prince	38406		
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Frearson		5 & Smaller	719270
		6 & Larger	719271



Clutch Head		3/32"	719272
		1/8"	719273
		5/32"	719274
		3/16"	719275
		1/4"	719276
		5/16"	719277

Socket Head		5 & 6 Set Screw	719278
		8 Set Screw	719279
		5 & 6 Cap Screw	719280
		10 Set Screw	719280
		8 Cap Screw	719281
		1/4 Set Screw	719281
		10 Cap Screw	719282
		5/16 Set Screw	719282
		1/4 Cap Screw	719283
		3/8 Set Screw	719283
		5/16 Cap Screw	719284
		7/16 Set Screw	719284
		1/2 Set Screw	719285
		3/8 & 1/2 Cap Screw	719286
		5/8 Set Screw	719286
		1/2 Cap Screw	719287
		3/4 Set Screw	719287

1/4 INCH HEX SHANK BITS FOR RECESSED HEAD SCREWS

Screw Type	Size	Bit No.	Point Size	Length
Phillips	2-3-4	17922	#1	1 1/8"
Phillips	5 to 10	39018	#2	1 1/8"
Phillips	5 to 10	18098	#2	2 3/8"
Phillips	12 to 16	21366	#3	1 1/8"



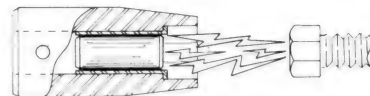
Screw Type	Size	Bit No.
Frearson	3/16" Body	719180
Frearson	1/4" Body	719181
Frearson	5/16" Body	719182
Clutch Head	3/32	719183
Clutch Head	1/8	719184
Clutch Head	5/32	719185
Clutch Head	3/16	719186
Clutch Head	1/4	719187
Clutch Head	5/16	719188
Socket Head	5-6 Cap Screw	719189
Socket Head	10 Set Screw	719189
Socket Head	8 Cap Screw	18577
Socket Head	1/4" Set Screw	18577
Socket Head	10 Cap Screw	18578
Socket Head	5/16" Set Screw	18578
Socket Head	1/4" Cap Screw	18579
Socket Head	3/8" Set Screw	18579
Socket Head	5/16" Cap Screw	719193
Socket Head	7/16" Set Screw	719193
Socket Head	3/8" Cap Screw	719194
Socket Head	1/2" Set Screw	719194

1/4-INCH HEX SHANK EXTENSION



Sq. Drive Inches	No.	Length Inches
1/4	20510	2 1/2
1/4	20511	6
3/8	719450	1 5/8
3/8	719451	6

MAGNETIC SOCKETS FOR 1/4-INCH SQUARE DRIVE



Hex Socket Size In.	Socket Depth In.	No.
For Hex Head Screws		
1/4	.125	38420
9/32	.125	38421
5/16	.135	38422
11/32	.140	38423
3/8	.160	38424
7/16	.218	38425
For Hex Head Nuts		
1/4	.125	38414
9/32	.125	38415
5/16	.156	38416
11/32	.156	38417
3/8	.187	38418
7/16	.281	38419

HEX SOCKETS



Sq. Drive Inches	Hex Socket Inches	No.
1/4	1/4	20512
1/4	9/32	20513
1/4	5/16	20514
1/4	11/32	20515
1/4	3/8	20516
1/4	7/16	20517
1/4	1/2	20518
3/8	1/4	22762
3/8	5/16	22764

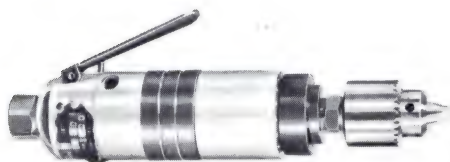
1/4" HEX SHANK NUTSETTERS



No. 719360	Broached Opening—3/16" Single Hex
No. 719361	Broached Opening—1/4" Single Hex
No. 719362	Broached Opening—9/32" Single Hex
No. 719363	Broached Opening—5/16" Single Hex
No. 719364	Broached Opening—11/32" Single Hex
No. 719365	Broached Opening—3/8" Single Hex
No. 719366	Broached Opening—7/16" Single Hex
No. 719367	Broached Opening—1/2" Single Hex
No. 719368	Broached Opening—9/16" Single Hex



815 PD20-Drill



815 LD20-Drill

DRILLS UP TO 1/4 INCH CAPACITY

Model No.	RPM	Capacity in Steel Inches	Stand. Chuck Cap. In.	Overall Length Inches	Side to Center Inches	Weight Pounds
LEVER HANDLE						
815LD11	1100	1/4	1/4	7 1/4	1 3/8	1 5/8
815LD20	2000	3/16	3/16	6 7/8	1 3/8	1 1/2
PISTOL GRIP						
815PD11	1100	1/4	1/4	6 3/8	1 3/8	2 1/2
815PD20	2000	3/16	3/16	5 1/2	1 3/8	1 3/4

Standard Equipment: 1/4 inch F.P.T. Air Inlet. Geared chuck and key of capacity listed in table.

Note: No. 900-135 chuck guard furnished with drill on special order.

815 SERIES 90° ANGLE DRILLS



815 LN11-AT35



815 LN11-AT67

Model No.	RPM	Head	Capacity In Steel Inches	Stand. Chuck Cap. In.	Overall Length	Side to Center	Weight Pounds
815LN6-AT35	600	Std.*	1/4	1/4	10 11/16	5/8	2 3/4
815LN11-AT35	1100	Std.*	3/16	3/16	10 11/16	5/8	2 3/4
815LN18-AT35	1800	Std.*	3/16	3/16	10 11/16	5/8	2 3/4
815LN11-AT55	1100	Small†	5/32	5/32	10 1/2	7/16	2 1/4
815LN18-AT55	1800	Small†	5/32	5/32	10 5/16	7/16	2 1/4
815LN11-AT67	1100	Small‡	3/16	—	10 1/2	7/16	2 1/4
815LN18-AT67	1800	Small‡	3/16	—	9 11/16	7/16	2 1/8

* Head equipped with 3/8"-24 Spindle

† Head equipped with #0 Jacobs Taper, No. 900-100 5/32" Geared Chuck and No. 900-101 Key.

‡ Head equipped with 1/4"-28 female thread for threaded shank drills and drill adapters for close quarter work.

Standard Equipment: 1/4" FPT air inlet. Geared chuck and key as specified in table above

815 SERIES 45° ANGLE DRILLS



815 LN11-AT58

Model No.	RPM	Head	Capacity In Steel Inches	Stand. Chuck Cap. In.	Overall Length	Side to Center	Weight Pounds
815LN11-AT58	1100	Small†	5/32	5/32	10 3/8	1/2	2 3/8
815LN18-AT58	1800	Small†	5/32	5/32	9 7/16	1/2	2 1/8

Standard Equipment: 1/4 inch FPT Air Inlet.

† Head equipped with #0 Jacobs Taper and No. 900-100 5/32" capacity geared chuck and 900-101 key.

835 - 900 Series Drills

Master Power

UP TO 3/8 INCH CAPACITY

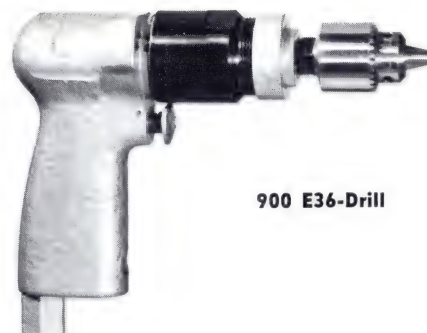
Model No.	RPM	Capacity in Steel Inches	Stand. Chuck Cap. In.	Overall Length Inches	Side to Center Inches	Weight Pounds
LEVER HANDLE						
901D	600*	3/8	3/8	3 3/4	1 3/8	2 1/4
901F	900*	5/16	5/16	8 3/4	1 3/8	2 1/4
901C	1200*	1/4	1/4	8 3/4	1 3/8	2 1/4
901B	2400	1/4	1/4	8 1/8	1 3/8	2
901E	3600	3/16	3/16	8 1/8	1 3/8	2
901A	4800	3/16	3/16	8 1/8	1 3/8	2
901	20000	1/8 †	5/32	6 1/4	1 3/8	1 1/4
PISTOL GRIP		† Capacity in aluminum.				
900D	600	3/8	3/8	7 7/16	1 3/8	2 1/2
900F	900	5/16	5/16	7 7/16	1 3/8	2 1/2
900C	1200	1/4	1/4	7 7/16	1 3/8	2 1/2
900B	2400	1/4	1/4	6 13/16	1 3/8	2 1/4
900E	3600	3/16	3/16	6 13/16	1 3/8	2 1/4
900A	4800	3/16	3/16	6 13/16	1 3/8	2 1/4
900	20000	1/8 †	5/32	4 11/16	1 3/8	1 1/2

Standard Equipment: 1/4-inch F.P.T. inlet. Geared chuck and key of capacity listed in table.

Note: No. 900-135 chuck guard furnished with drill on special order.
No. 700241 side handle available on special order.

* Caution should be exercised in applying these lever handle drills because of high torque reaction to the operator.

† Capacity in aluminum.



900 E36-Drill



901 F9-Drill

835 SERIES 90° ANGLE DRILLS

Model No.	RPM	Head	Capacity In Steel Inches	Stand. Chuck Cap. In.	Overall Length Inches	Side to Center Inches	Weight Pounds
835LN6-AT35	600	Std.*	1/4	1/4	11 7/16	5/8	3
835LN9-AT35	900	Std.*	1/4	1/4	11 7/16	5/8	3
835LN12-AT35	1200	Std.*	1/4	1/4	11 7/16	5/8	3
835LN24-AT35	2400	Std.*	3/16	3/16	10 3/4	5/8	2 3/4
835LN36-AT35	3600	Std.*	3/16	3/16	10 3/4	5/8	2 3/4
835LN48-AT35	4800	Std.*	3/16	3/16	10 3/4	5/8	2 3/4
835LN24-AT55	2400	Small†	5/32	5/32	10 5/16	7/16	2 1/2
835LN36-AT55	3600	Small†	5/32	5/32	10 5/16	7/16	2 1/2
835LN48-AT55	4800	Small†	5/32	5/32	10 5/16	7/16	2 1/2
835LN24-AT67	2400	Small‡	3/16	—	10 5/16	7/16	2 1/2
835LN36-AT67	3600	Small‡	3/16	—	10 5/16	7/16	2 1/2
835LN48-AT67	4800	Small‡	3/16	—	10 5/16	7/16	2 1/2

Standard Equipment: 1/4-inch F.P.T. Air Inlet.

* Head equipped with 3/8-24 spindle, geared chuck and key of capacity in table.

† Head equipped with #0 Jacobs taper, No. 900-100 geared chuck and 900-101 key.

‡ Head equipped with 1/4-28 female thread for threaded shank drills and drill adapters. For close quarter work

835 SERIES 45° ANGLE DRILLS

Model No.	RPM	Head	Capacity In Steel Inches	Stand. Chuck Cap. In.	Overall Length Inches	Side to Center Inches	Weight Pounds
835LN24-AT58	2400	Small†	5/32	5/32	10 13/16	7/16	2 1/4
835LN36-AT58	3600	Small†	5/32	5/32	10 13/16	7/16	2 1/4
835LN48-AT58	4800	Small†	5/32	5/32	10 13/16	7/16	2 1/4

Standard Equipment: 1/4-inch F.P.T. air inlet.

† Head equipped with #0 Jacobs taper and No. 900-100 geared chuck and 900-101 key.



835 LN36-AT35



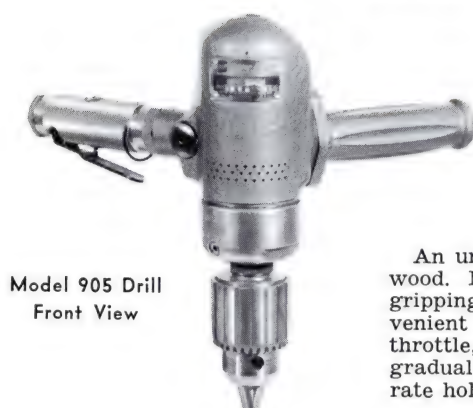
835 LN36-AT55



835 LN36-AT58

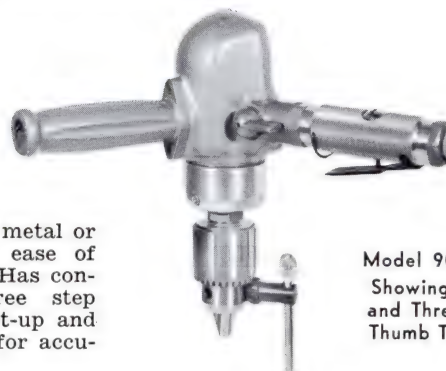
MODEL 905 DRILL 1/2" CHUCK CAPACITY

Available on Special Order



Model 905 Drill
Front View

An unusual drill for work in metal or wood. Handles positioned for ease of gripping, and greatest control. Has convenient thumb operated, three step throttle, permits slow tool start-up and gradual increase to full speed for accurate hole alignment.



Model 905 Drill
Showing Lever
and Three Step
Thumb Throttle

Model No.	RPM	Capacity in Steel	Capacity in Wood	Weight Lb.	Capacity in Aluminum
905	1800	3/8"	1"	5.8	1/2"

Standard Equipment: 3/8-in. F.P.T. air inlet. 1/2-20 threaded spindle. No. 900-114 1/2-in. capacity geared chuck and 900-115 key. Lever and thumb operated throttle, exhaust through dead handle.



MODEL 640 RA
1/2" Capacity Right Angle
Heavy Duty Drill
At 300 or 600 R.P.M.

AT67

Close Quarter Drill



Close Quarter Drilling

Angle type drilling motors 815 and 835 equipped with Attachment AT-67 can also be used with threaded type collets.

See Manufacturer's or Distributor's catalogs for 1/4-28 threaded shank collets for 1/8" to 1/2" capacities.

DRILL CHUCKS

Capacity Inches	Thread	Chuck No.	Key No.
5/32	"0" Jacobs Taper	900-100	900-101
3/16	3/8 - 24	900-110	900-111
1/4	3/8 - 24	900-98	900-99
1/4 Heavy Duty	3/8 - 24	900-123	900-124
5/16	3/8 - 24	900-112	900-113
3/8	3/8 - 24	900-103	900-104
1/2	1/2 - 20	900-114	900-115

Common Drill Troubles and Causes

Indications	Causes
Drill will not enter work	Drill is dull. Lip clearance too small. Too heavy a web.
Hole oversize	Spindle run-out. Unequal angle or length of cutting edges.
Outer corners break down	Cutting speed too high. Hard spots in material. No cutting compound at drill point. Flutes clogged with chips.

DRILL DATA

Suggested Speeds for High Speed Steel Drills

Speed in S.F.M.

Slate Marble and Stone	15-25
Alloy Steel—300 to 400 Brinell	20-30
Stainless Steel and Hard Chilled Cast Iron	30-40
Steel Forgings and Monel Metal	40-50
Tool Steel—1.2C	50-60
Steel—.4C to .5C	70-80
Mild Steel and Malleable Iron	80-110
Med. Hard Cast Iron and High Tensile Bronze	70-120
Soft Cast Iron and Bakelite Type Materials	100-150
Brass, Bronze, Aluminum and Hardwood	200-300
Magnesium and Soft Wood	250-400

To determine motor size and speed best suited to obtain peak cutting efficiency based on surface feet per minute (S.F.M.) use the following formulas:

$$\text{S.F.M.} = .26 \times \text{R.P.M.} \times \text{Drill Dia. in inches}$$

$$\text{R.P.M.} = 3.8 \times \text{S.F.M.} \div \text{Dia. of Drill in inches}$$

EXAMPLE

Drill Model 900A-4800 R.P.M. with 3/16" capacity chuck.

$$\text{S.F.M.} = .26 \times 4800 \times .187 = 235 \text{ S.F.M.}$$

Therefore, this tool would best be suited for drilling of brass, bronze, aluminum and hard wood materials.

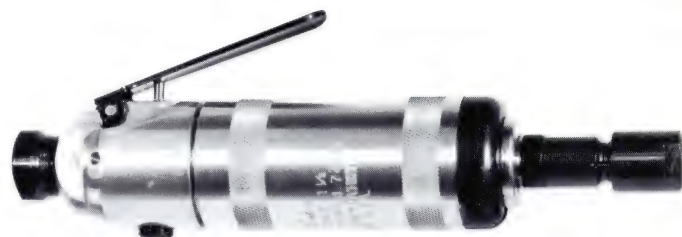
Midget Grinders

Three models of Master Power Midget Die Grinders as illustrated provide a choice to suit varied job applications.

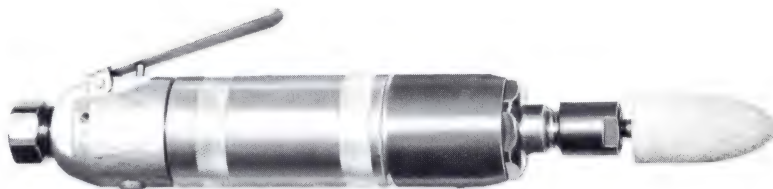
All throttle parts and most motor parts are interchangeable between models.

Compact in size, light in weight and rugged in construction, these are real production cost saving, high production tools.

Specially selected ball bearings are fitted for high speed. Safety lever clasp type for positive off and on control. Powerful and precision made internal blade type of vibrationless motor.



Model 501—One piece spindle, self centering, offset blade type motor. Short front end for close precision work. Motor and supporting bearing close to working accessory.



Model 550—Heavy duty front end consisting of two-piece splined spindle, utilizing two additional ball bearings on front shaft. Model 550 is equipped with a "built-in" collet for shank type accessories.

Model 530—Right angle die grinder at 5000 R.P.M. for metal or scale removal in hard-to-get-at areas. For use with rotary files and mounted points. Built-in collet, for $\frac{1}{4}$ ", $\frac{3}{16}$ ", or $\frac{1}{8}$ ". Angle head length is $3\frac{1}{4}$ " to tip of collet. Collet diameter $\frac{5}{16}$ ".



SPECIFICATIONS

Model No.	Free R.P.M.	Wheel Capacity		Wire Brush	Weight	Length	Air Inlet
		Vitrified	Organic				
501	24,000	1"	1 1/2"	1 1/2"	1 lb.	5-9/16"	1/4" F.P.T.
530	5,000	—	—	—	2 lbs. 12 oz.	10-3/4"	1/4" F.P.T.
530	15,000	1"	1 1/2"	1 1/2"	2 lbs. 2 oz.	9-1/4"	1/4" F.P.T.
550	20,000	1"	1 1/2"	1 1/2"	1 lb. 3 oz.	7-11/16"	1/4" F.P.T.

Standard Equipment: Model 501— $\frac{1}{4}$ " collet chuck and accessory wrenches. Optional in place of collet chuck, $\frac{3}{8}$ " adapter, or $\frac{1}{8}$ " collet chuck. Wheels are extra. Spindle thread $\frac{3}{8}$ -24. Spindle projection $\frac{7}{16}$ ".

Model 550— $\frac{1}{4}$ " collet chuck and accessory wrenches. Optional $\frac{3}{8}$ " or $\frac{1}{8}$ " collet.

Model 530— $\frac{1}{4}$ " collet chuck and accessory wrenches. Optional in place of $\frac{1}{4}$ " collet, $\frac{3}{16}$ " or $\frac{1}{8}$ " collet. No. 700060 long throttle lever available on special order.

ACCESSORIES FOR MIDGET GRINDERS

Collets for Model 501

U-500-36A $\frac{1}{4}$ " capacity
U-500-64A $\frac{1}{8}$ " capacity
U-500-65A $\frac{3}{16}$ " capacity

Collets for Model 550

(Require No. 550-35 Sleeve)
550-36 $\frac{1}{4}$ " capacity
550-64 $\frac{1}{8}$ " capacity
550-65 $\frac{3}{16}$ " capacity

Wheel Adapters Model 501

U-500-42 3" Ext. Adapter $\frac{3}{8}$ " Arbor
U-500-44 1" Ext. Adapter $\frac{3}{8}$ " Arbor



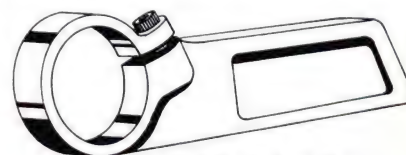
U-500-44 Adapter Unit for $\frac{3}{8}$ " Arbor Wheels Model 501



U-550-59 Adapter Unit for $\frac{3}{8}$ " Straight Wheels Model 550



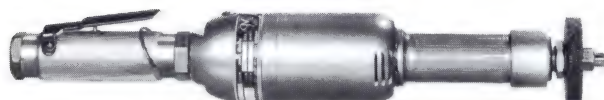
SLEEVE COLLET BODY



U-501-44 Tool Post Holder Assembly 501 and 550 Models



602SP



602SL



602SV



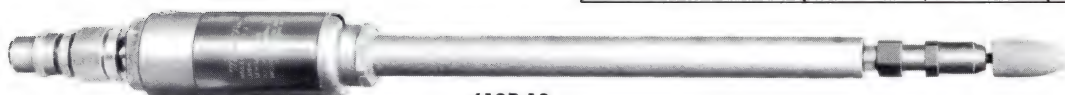
615V



616T



616P



613P-13

Master Power standard duty die grinders at 20,000 R.P.M. have the speed, power, and punch for all types of light production, rough and precision grinding on dies of all sizes, types and shapes.

Powerful, vibrationless internal blade type motors, in the 602S series, are muffled for quiet operation. All have sturdy one-piece spindles, hard chrome plated for maximum wear resistance, and all are equipped with four selected top quality bearings.

Model No.	Free R.P.M.	Throttle Type	Length	Weight	Spindle Proj.	Air Inlet
602SP	20,000	Push	13 $\frac{11}{16}$ "	5 lbs.	1"	$\frac{3}{8}$ " F.P.T.
602SL	20,000	Lever	15 $\frac{1}{8}$ "	5 lbs. 2 ozs.	1"	$\frac{3}{8}$ " F.P.T.
602ST	20,000	Thumb	10 $\frac{11}{16}$ "	4 lbs. 4 ozs.	1"	$\frac{1}{4}$ " F.P.T.
602SV	20,000	Valve Hd.	10 $\frac{11}{16}$ "	4 lbs. 2 ozs.	1"	$\frac{1}{4}$ " F.P.T.

Standard Equipment: No. U612-36A $\frac{1}{4}$ -in. Collet Chuck, 602-47 Wheel Washer, 602-54 Spindle Nut, and 602-46 Collet Wrench.

Optional in place of Collet, One of following: No. 602-41 Cone Wheel Spacer, No. 602-57 $\frac{1}{2}$ -13 Cone Wheel Adapter or No. U602-42 3" Extension. Spindle Thread $\frac{3}{8}$ "-24.

Model No.	Free R.P.M.	Throttle Type	Length	Weight
615P	20,000	Push	11 $\frac{3}{4}$ "	4 lbs. 8 oz.
615L	20,000	Lever	13 $\frac{1}{4}$ "	4 lbs. 10 oz.
615T	20,000	Thumb	10 $\frac{5}{8}$ "	3 lbs. 12 oz.
615V	20,000	Valve Hd.	10 $\frac{5}{8}$ "	3 lbs. 10 oz.
616P	16,000	Push	9 $\frac{1}{4}$ "	3 lbs. 14 oz.
616L	16,000	Lever	10 $\frac{3}{8}$ "	4 lbs. 0 oz.
616T	16,000	Thumb	6 $\frac{1}{4}$ "	3 lbs. 2 oz.
616V	16,000	Valve Hd.	6 $\frac{1}{4}$ "	3 lbs. 0 oz.

13" and 26" EXTENSION GRINDERS SHOWN BELOW AVAILABLE ON SPECIAL ORDER

Model No.	Free R.P.M.	Throttle Type	Length	Weight
613P-13	15,000	Push	21 $\frac{1}{2}$ "	6 lbs. 1 oz.
613T-13	15,000	Thumb	21 $\frac{1}{2}$ "	5 lbs. 5 oz.
613L-13	15,000	Lever	23"	6 lbs. 3 oz.
613P-26	15,000	Push	34 $\frac{1}{2}$ "	8 lbs. 10 oz.
613T-26	15,000	Thumb	34 $\frac{1}{2}$ "	7 lbs. 14 oz.
613L-26	15,000	Lever	36"	8 lbs. 12 oz.

Standard Equipment: No. U612-36A $\frac{1}{4}$ " Collet Chuck, No. 602-47 Wheel Washer, No. 602-54 Spindle Nut, and No. 602-46 Collet Wrench.

Optional in place of Collet, one of following: No. 602-41 Cone Wheel Spacer, No. 602-57 $\frac{1}{2}$ "-13 Cone Wheel Adapter, No. U602-42 3" Extension Adapter for Models 615 and 616. Spindle Thread $\frac{3}{8}$ "-24.

MAXIMUM WHEEL DIAMETERS FOR DIE GRINDERS

Speed (R.P.M.)	Grinding Wheels		Buffing Wheels	Radial Wire Brush
	Vitrified	Organic		
20,000	1"	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "	1 $\frac{1}{2}$ "
17,000	1 $\frac{1}{2}$ "	2"	2"	2"
16,000	1 $\frac{1}{2}$ "	2"	2"	2"
12,000	2"	3"	3"	3"
9,000	2 $\frac{3}{4}$ "	4"	4"	4"

Master Power heavy duty die grinders in the 640 and 650 series are designed for powerful, quiet operation on production work demanding precision metal removal, from small-radius concave surfaces, to large automotive die finishing and jig clean up work.

Rugged steel motor housings, selected precision bearings, one-piece hard chrome plated spindles, and precise governor controlled speeds in the 650 models add many productive hours to the working life of these tools.

Used with abrasive wheels, mounted points, rotary files, or sanding drums, their easy balance, trim dimensions and large rotor blade area make these tools extremely desirable for hundreds of metal finishing applications.

Model No.	Free R.P.M.	Throttle Type	Length	Weight	Spindle Proj.	Air Inlet
640SP	17,000	Push	13 5/8"	5 lbs.	15/16"	3/8" F.P.T.
640SL	17,000	Lever	15 1/4"	5 lbs. 2 ozs.	15/16"	3/8" F.P.T.
640ST	17,000	Thumb	10 5/8"	4 lbs. 4 ozs.	15/16"	1/4" F.P.T.
640SV	17,000	Valve Hd.	10 5/8"	4 lbs. 2 ozs.	1"	1/4" F.P.T.
B650SP	12,000	Push	14 11/16"	4 lbs. 12 ozs.	1 1/4"	3/8" F.P.T.
B650SL	12,000	Lever	16 1/4"	4 lbs. 14 ozs.	1 1/4"	3/8" F.P.T.
B650SP	9,000	Push	14 11/16"	4 lbs. 12 ozs.	1 1/4"	3/8" F.P.T.
B650SL	9,000	Lever	16 1/4"	4 lbs. 14 ozs.	1 1/4"	3/8" F.P.T.

Standard Equipment: No. U612-36A 1/4-in. Collet Chuck, 602-47 Wheel Washer, 602-54 Spindle Nut, and 602-46 Collet Wrench.

Optional in place of Collet, One of following: No. 602-41 Cone Wheel Spacer, No. 602-57 1/2-13 Cone Wheel Adapter or No. U602-42 3" Extension.

Spindle Thread 3/8"-24.

Standard Equipment Model 650: (Governed Model) U602-62 Wheel Guard, 2 No. 622-47A Wheel Washers, No. 602-54 Spindle Nut.

DIE GRINDER ACCESSORIES

Die Grinder Collets

U612-36A 1/4" Cap.
U612-56A 3/8" Cap.
U612-57A 1/2" Cap.
U612-64A 5/8" Cap.
U612-65A 3/4" Cap.



Wheel Guards for Model 650S Grinder

U602-62-2 2" Guard
U602-62-3 3" Guard
U602-62-4 4" Guard
U602-62-5 5" Guard



602-57 1 1/2" Ext. Adapter, 1/2" Arbor

Wheel Adapters



602-41 Cone Wheel Spacer



602-60 1 3/4" Ext. Adapter, 3/8" Arbor



U602-42 3" Ext. Adapter, 3/8" Arbor



U602-59 1/2" Wheel Adapter 3/8" Arbor

650-60 3/8" Adapter For Slotted Rubber Drums



EXPANDING SLOTTED RUBBER DRUMS

No. 719951 — Tapered Cone 3/8"-11 Thread 1 5/8" x 1 1/4" x 3 3/4" Face

No. 719950 — Straight . 3/8"-11 Thread 2-13/32" dia. x 2 3/4" Face

U602-44 Tool Post Holder (For Steel Housings)

U602-56 Tool Post Holder (For Alum. Housings)



640SP



640SV



640SL



650SP



B650SL



No. 650-60 adapter permits use of drum on Model 650 spindle.



Model 604
4" Heavy Duty Grinder



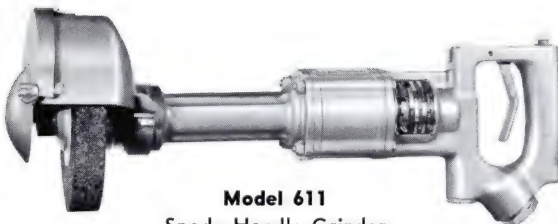
Model 604C
Cone Wheel Grinder with Safety Throttle



Model 605
4" Heavy Duty Spade Handle Grinder



Model 610
Straight Handle 6" Wheel Grinder



Model 611
Spade Handle Grinder



Model 610B
Buffer with Safety Throttle

The Master Power horizontal grinders shown on these pages range in speed from 3100 to 8750 R.P.M., and are designed for continuous duty production; for grinding, wire brushing, and polishing within their rated wheel capacity.

As in other Master Power tools, the use of hard chrome on important wear points, the floating type self-centering motor, the one piece spindle, suspended in four selected bearings results in a substantial increase in tool life.

Extensive use of tough, light weight alloys for housings and handles, positive governor-controlled speeds, regardless of load change, comfortable, sure-grip handles and quick acting throttles provide balanced, easy handling tools for fast, efficient metal removal.

All horizontal grinders are equipped with a large oil reservoir, and automatic lubricators. Bearings are sealed against moisture and dirt, end plates are hardened for long life, interchangeable parts reduce costs, simplify maintenance.

4" HEAVY DUTY GRINDERS

For use with 4" Organic Grinding Wheels, 4" Buffing Wheels, and 4" Wire Brushes.

3" Cone Wheels on 604C

Model No.	Free R.P.M.	Throttle Handle	Length	Weight, Less Guard & Wheel	Spindle Projection
604	8750	Straight	20 1/8"	8 lbs. 8 ozs.	2"
604C	8750	Straight	19 1/8"	8 lbs. 6 ozs.	1"
604T*	8750	Straight	20 1/8"	8 lbs. 8 ozs.	2"
605	8750	Spade	19"	8 lbs. 8 ozs.	2"
605C	8750	Spade	18"	8 lbs. 4 ozs.	1"

* Safety type throttle, instant "off" when throttle is released.

Standard Equipment: Wheel guard, wheel washer and nut. Spindle thread 3/8"-11. Air inlet 1/2" F.P.T.

Speeds other than above available on special order.

6" WHEEL GRINDERS

For use with 6" Organic Grinding Wheels, 6" Buffing Wheels and 6" Wire Brushes.

Model No.	Free R.P.M.	Throttle Handle	Length	Weight, Less Guard & Wheel	Spindle Projection
610	6000	Straight	20 3/4"	8 lbs. 8 ozs.	2"
610T*	6000	Straight	20 3/4"	8 lbs. 8 ozs.	2"
611	6000	Spade	19"	8 lbs. 14 ozs.	2"

* Safety type throttle, instant "off" on release.

Standard Equipment: Wheel guard, wheel washer and nut. Spindle thread 3/8"-11, air inlet 1/2" F.P.T.

Optional speeds from 4000 to 6000 R.P.M. to order.

6" HEAVY DUTY GRINDERS

For use with 6" Organic Grinding Wheels,
and 6" Wire Brushes.

Model No.	Free R.P.M.	Throttle Handle	Length	Weight, Less Guard & Wheel	Spindle Projection
606	6000	Straight	22 1/2"	11 lbs. 10 ozs.	2 1/8"
606T*	6000	Straight	22 1/2"	11 lbs. 10 ozs.	2 1/8"
607	6000	Spade	20 3/4"	12 lbs.	2 1/8"

* Safety type throttle, instant "off" on release.

Standard Equipment: Wheel guard, wheel washer and nut. Spindle thread 5/8"-11, air inlet 1/2" F.P.T.

Speeds other than above available on special order.

Master Power 6 inch and 8 inch horizontal grinders, from 3100 to 6000 R.P.M. are generally used for heavy duty grinding on welds, heavy iron and steel castings, billets and large rolls, where it is more economical to take a portable grinder to the work.

Buffing and wire brushing of large fabricated housings preparatory to painting can be handled quickly and efficiently with the horizontal type tools.

8" WHEEL GRINDERS

For use with 8" Organic Grinding Wheels,
and 8" Wire Brushes.

Model No.	Free R.P.M.	Throttle Handle	Length	Weight, Less Guard & Wheel	Spindle Projection
608	4500	Straight	22 1/2"	12 lbs. 10 ozs.	2 1/8"
608T*	4500	Straight	22 1/2"	12 lbs. 10 ozs.	2 1/8"
609	4500	Spade	20 3/4"	12 lbs.	2 1/8"

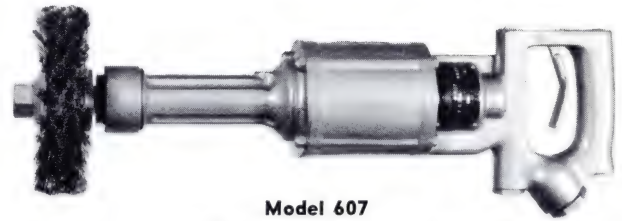
* Safety type throttle, instant "off" on release.

Standard Equipment: Wheel guard, wheel washer and nut. Spindle thread 5/8"-11, air inlet 1/2" F.P.T.

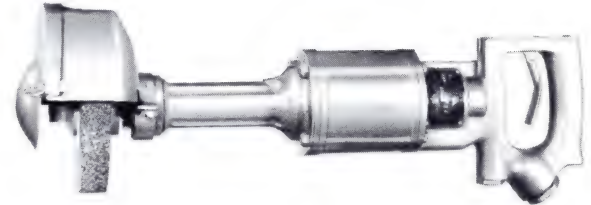
Optional speeds available to order 3000 to 4500 R.P.M.

EXTENSION GRINDERS

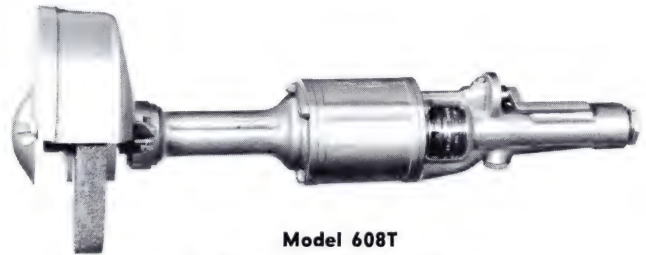
15" and 32" Extension Grinders can be furnished on special order.



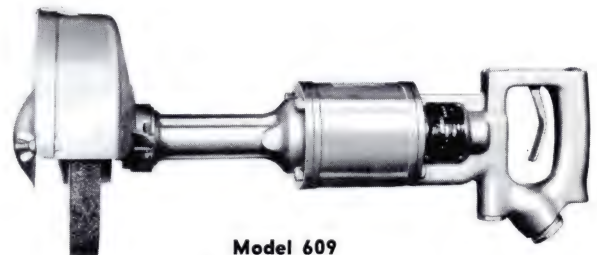
Model 607
Spade Handle Wire Brush



Model 607
Spade Handle Heavy Duty Grinder



Model 608T
8" Grinder with Safety Throttle



Model 609
8" Spade Handle Grinder



Model 607 Spade Handle Grinder
showing Hinged Guard open for
quick easy wheel change

MODEL 201 VERTICAL SANDER

Light Duty Sanding

Cup Wire Wheel Brushing

Small, light, easy to handle, the Model 201 is designed for superior quality highlight finishing of automobile body panels, stainless steel shapes, or other contoured metal surfaces where an extremely smooth base is required.

A quiet, vibrationless, packaged motor unit, precision gearing for constant load speeds, thumb type or lever operated throttles, and a one piece, four bearing spindle make this tool ideal for "special finish" sanding or wire brushing applications.



MODEL 201-18

With 5" Flexible Sanding Pad
and Optional Lever Throttle
Handle

MODEL 201-32
With 4" Wire Brush



MODEL 2010-40

High Speed Sander with
Flexible Backup Pad

Model No.	Free R.P.M.	Sanding Pad Dia.	Cup Wire Brush	Height to Base of Wheel Collar	Weight Less Pad
201-18	1800	7"	4"	6"	5 lb.
201-32	3200	7"	4"	6"	5 lb.
2010-40	4000	7"	4"	6"	5 lb.

Standard Equipment: $\frac{5}{8}$ "-11 Jam Nut, Wheel Collar Wrench. Air Inlet $\frac{3}{8}$ " F.P.T. Spindle Projection 13/16".

SPECIAL DUTY RIGHT ANGLE AND PISTOL GRIP POLISHERS AND SANDERS



Model 520

Pistol Grip Sander Polisher 5,000 and 20,000 R.P.M., with Side Handle and Abrasive Disc Adapter

MODEL 540 RIGHT ANGLE POLISHER SANDER

Lever Throttle, Side Handle.

Available at 900, 1200, 2400, 3600, 4800 R.P.M.



Vertical Grinders

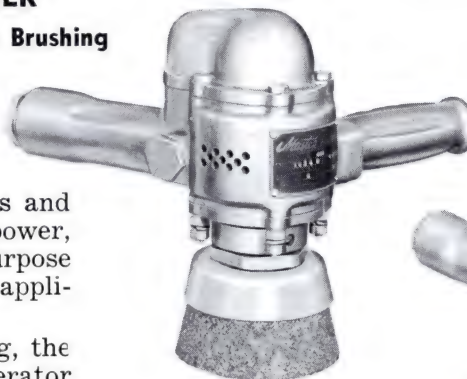
Master Power

MODEL 401 VERTICAL GRINDER

Standard Duty for Grinding, Sanding, Wire Brushing

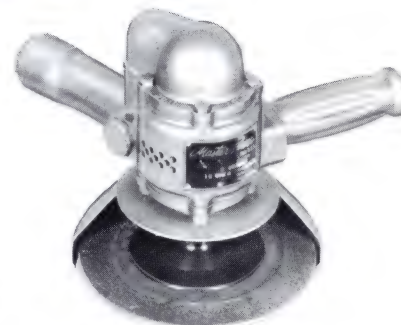
Because of its small over all dimensions and light weight compared to the abundance of power, the Model 401 is a truly versatile general purpose tool for grinding, sanding or wire brushing applications.

Especially useful for light duty grinding, the weight and balance of the 401 enables an operator to cut down high spots, or smooth out flat surfaces in awkward, even overhead positions with less fatigue. Equipped with flared cup wheels they reach spots inaccessible to other power grinders.



MODEL 401
With 4" Cup Wheel
and Standard Cup Guard

MODEL 401S
With Depressed
Center Wheel and
Guard



Model No.	Free R.P.M.	Wheel Capacity		Sanding Pad	Dep. Center Wheel	Cup Wire Brush	Height to Base of Wheel Collar	Spindle Projection
		Vitrified	Organic					
401	6000	4"	6"	7"	7"	6"	6 1/2"	15/16"

Standard Equipment: Wheel Guard (specify for cup type, or depressed center wheel)
Spindle Thread $\frac{3}{8}$ "-11. Optional spindle with $1\frac{5}{16}$ " projection for use with jam nut available on special order.
Optional Speeds of 4500 to 8000 R.P.M. available on special order.

REVOLVING CUP TYPE WHEEL GUARDS

(Standard Equipment)

No. 601-107-6	6" Flared Cup
No. 601-107-4	4" Flared Cup
No. 601-109-6	6" Straight Cup

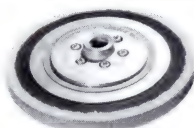
DEPRESSED CENTER WHEEL GUARDS

No. 401-105	7 inch
No. 401-106	9 inch
No. 601-105	7 inch
No. 601-106	9 inch

Vertical Grinder/Sander Accessories

SANDING PADS -- PAD NUTS

Sanding Pad Type			Part No.
D-2	7" Dia.	Straight	719984
D-2	7" Dia.	Tapered	719983
D-2	9" Dia.	Straight	719982
D-2	9" Dia.	Tapered	719981
D-2	Pad Nut		719980
D-11	7" Dia.	Straight	719979
D-11	8" Dia.	Straight	719978
D-11	Pad Nut		719977
Spiral Cool	7"	Flexible	719976
Spiral Cool	7"	Medium	719975
Spiral Cool	9"	Flexible	719974
Spiral Cool	9"	Medium	719973
Spiral Cool	Pad Nut		719972



SKIRT TYPE WHEEL GUARDS For MODELS 401 and 601

U601-41	6" Guard
U401-83	6" Guard
U401-89	5" Guard
U401-41	4" Guard



WIRE BRUSHES

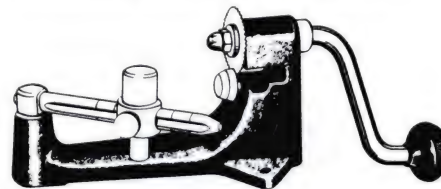
Cup Type 4" Dia.	.023 Ga.	719986
Cup Type 6" Dia.	.023 Ga.	719985

ABRASIVE DISC TRIMMER

Catalog No. 21808

For complete use of abrasive discs, this disc trimmer cuts them down to smaller sizes as the outer edges are worn out. Adjustable center hole pilot on calibrated swinging arm; cutting wheel mounted on one piece spindle and crank; base casting is screwed to bench. Takes discs of $9\frac{1}{8}$ " maximum diameter and either $\frac{7}{8}$ " or $\frac{1}{2}$ " center hole; trims down to 3" diameter.

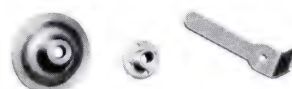
Replacement Cutter Only No. 21753



DEPRESSED CENTER WHEEL ADAPTER

Catalog No. 37110

Disc wheel adapter includes wheel backing flange, No. 22191 clamp washer, and No. 22231 spanner wrench for use with depressed center wheels.



MODEL 601 VERTICAL GRINDER

For Grinding - Sanding - Cup Wheel Wire Brushing
Depressed Center Wheels

For tough, extra duty grinding jobs, Master Power 601 Vertical Grinders with a proven industrial performance record, are outstanding in such applications as general clean-up of large and small castings requiring the removal of seams, gates, risers or other surface obstructions. For solder removal in automotive work, removal of scale, rust or paint by wire brushing, for grinding of butt welds, or welded seams, these Master Power heavy duty governed speed tools provide maximum power under the most severe operating conditions.

Model 601 vertical grinders, with strong, light weight alloy housings, and low slung sure-grip handles for balance and control will do most of the jobs performed by grinders of other types, plus the many applications where the close control over cup shaped wheels will reach surfaces not accessible to other tools.

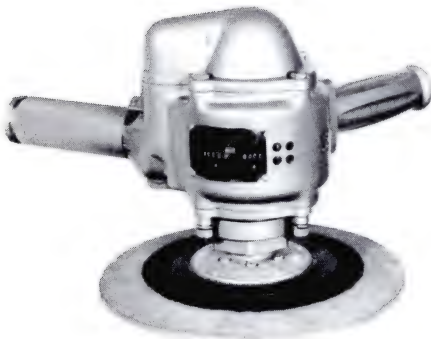
Master Power grinders feature one-piece spindles mounted in heavy duty ball bearings, cast in mufflers for noise control, large oil reservoirs, automatic lubrication, and positive "off-on" safety type throttle control.



MODEL 601
With 6" Cup
Wheel and Standard
Cup Wheel Guard



MODEL 601
With 6" Cup
Wire Brush



MODEL 601S
Vertical Sander
with 9" Backup Pad



MODEL 601S
With Depressed
Center Wheel and Guard

Weight Less Guard and Wheel 11 lbs. 8 oz.

Air Inlet 1/2" F.P.T.

Model No.	Free RPM	Wheel Capacity		Sanding Pad	Depressed Center Wheel	Cup Wire Brush	Ht. to Base of Wheel Collar	Spindle Ext.
		Vitrified	Organic					
601	6000	—	6"	—	—	—	7 1/4"	1 3/8"
601	4500	6"	6"	—	—	6"	7 1/4"	1 3/8"
601S	6000	—	—	7"	7"	—	7 1/4"	15/16"
601S	4500	—	—	9"	9"	6"	7 1/4"	15/16"

Standard Equipment: Wheel Guard (specify for cup type, or depressed center wheel), wheel nut and wrench. Spindle Thread 5/8"-11.

Optional Speeds from 3500 to 7000 R.P.M. on special order only.

Chipping Hammers

Master Power

Master Power chipping hammers deliver fast, powerful blows, producing maximum energy with a minimum of tool weight. Rapid, smooth piston travel in hard chromed barrels reduces shock to a minimum, and increases the life of the tool.

All chipper models can be furnished for use with, or without safety chisel retainers.

Retainers, both quick change and standard types illustrated below are extra cost, and must be used only with retainer type chisels. Standard chisel shanks, having no collar, cannot be held by the chisel retainers.

NOTE ON HAMMER ORDERS: ALWAYS SPECIFY HEX OR RD. BUSHING

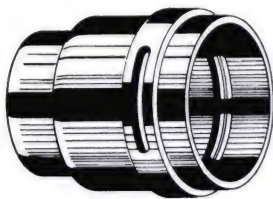
Model No.	Bore	Stroke	Overall Length	Weight Less Retainer	Air Inlet
1	1 1/8"	1"	11 7/8"	12 lbs. 8 ozs.	3/8" FPT
1R*	1 1/8"	1"	11 7/8"	12 lbs. 8 ozs.	3/8" FPT
2	1 1/8"	2"	13 3/8"	13 lbs. 2 ozs.	3/8" FPT
2R*	1 1/8"	2"	13 3/8"	13 lbs. 2 ozs.	3/8" FPT
3R*	1 1/8"	3"	14 7/8"	15 lbs.	3/8" FPT
4R*	1 1/8"	4"	16 1/8"	15 lbs. 12 ozs.	3/8" FPT

* "R" indicates barrels grooved for retainers. Plain models Nos. 1 and 2 cannot be equipped with retainers.

Standard Equipment: One locking spring wrench

Optional at Extra Cost: Chisels, Retainers, and Retainer Springs.

STANDARD RETAINER & SPRING

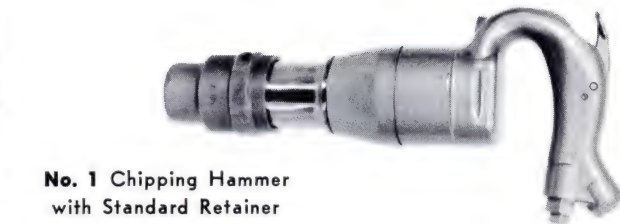


No. 719967 Retainer—Straight Type (for #1R & 2R Chippers)

No. 719966 Retainer—Tapered Type (for #3R & 4R Chippers)



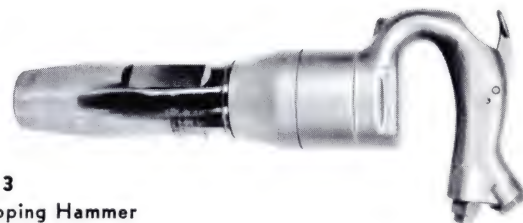
No. 179965 Lock Spring (for 719967 & 719966 Retainers)



No. 1 Chipping Hammer with Standard Retainer



No. 2 Plain Barrel Chipping Hammer

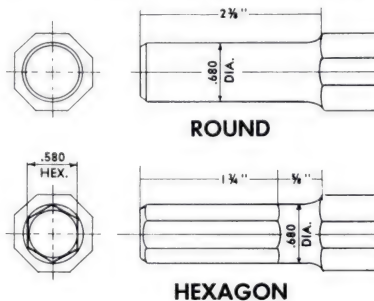


No. 3 Chipping Hammer



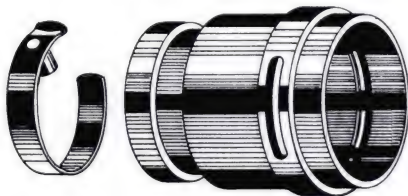
No. 4R Chipping Hammer with Quick Change Retainer

STANDARD NAVY SHANKS



For specifications on standard navy and retainer type chisels, for part numbers, nose types and lengths, see chart on following page.

QUICK CHANGE RETAINER WITH PARTS



No. 719962 Flat Spring with Pin

No. 719964 Quick Change Retainer—Straight Type (for 1R & 2R Chippers)

No. 719963 Quick Change Retainer—Tapered Type (for #3 & #4 Chippers)



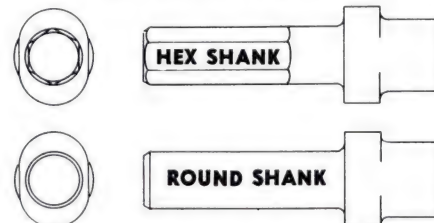
No. 719961 Rotating Insert



No. 719960 Insert Spring

Full Round Retainers Available on Special Order

RETAINER TYPE SHANKS



Retainer type chisels are for use with chipping hammers equipped with retainers shown above.

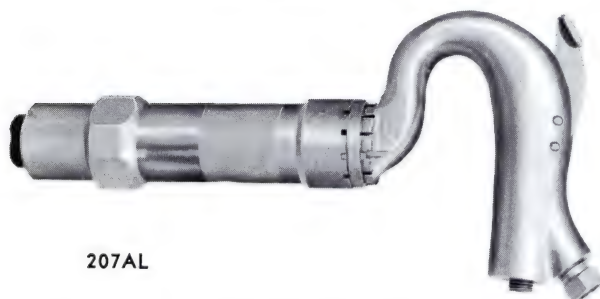
SCALING HAMMERS



205A Scaling Hammer



206A Scaling Hammer
Push Throttle

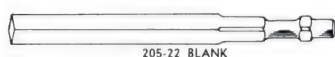


207AL

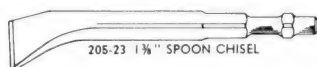
Speeds up any scaling operation with less air consumption because only the finest of materials and workmanship are used to give this economy of operation. Removes rust, scale, paint, soot, sand from castings, mortar and plaster, etc. For many operations where a small, light and fast percussion air tool is required. It delivers maximum output with a minimum of effort. A unique, yet simple, chisel retaining sleeve takes but three seconds for change of chisels and allows the positioning of chisel in four directions. Simple in design but rugged and tough. Only a few motions are required to completely dismantle tool for cleaning and maintenance.

Model No.	Bore	Stroke	Overall Length	Weight Less Chisel	Air Inlet
205 A	1"	1 1/8"	8 1/2"	3 lbs. 4 ozs.	1/4"
205AL*	1"	1 1/8"	8 1/2"	3 lbs. 2 ozs.	1/4"
206 A	1"	1 1/8"	9 3/4"	3 lbs. 8 ozs.	1/4"
206AL	1"	1 1/8"	9 3/4"	3 lbs. 6 ozs.	1/4"
207AL	1"	1 1/8"	11 1/8"	5 lbs.	1/4"

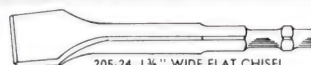
* "L" indicates light piston for better performance on light duty work.
Standard Equipment: One standard length chisel, specify style.



205-22 BLANK



205-23 1 3/8" SPOON CHISEL



205-24 1 3/8" WIDE FLAT CHISEL



205-25 FLAT CHISEL

STANDARD SCALER CHISELS 7" LONG — OTHER LENGTHS AND NOSE TYPES FURNISHED TO YOUR SPECIFICATIONS.

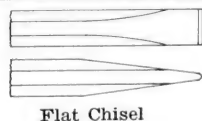
Scaler Star Drills

205-45 3/8" x 9"

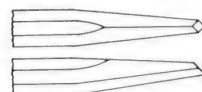
205-46 1/2" x 9"

205-47 5/8" x 9"

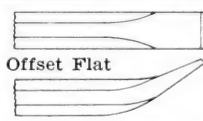
205-48 3/4" x 9"



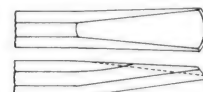
Flat Chisel



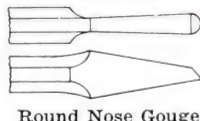
Diamond Point



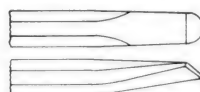
Offset Flat



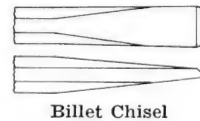
Hollow Gouge



Round Nose Gouge



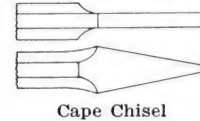
Half Round



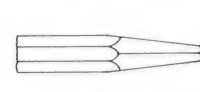
Billet Chisel



Roughing Tool



Cape Chisel



Moil Point

MASTER POWER CHIPPING HAMMER CHISELS

Style	Hex Shank		Round Shank		Hex Retain. Shank		Rd. Retain. Shank	
	9"	12"	9"	12"	9"	12"	9"	12"
Flat	719884	719634	719885	719635	719928	719678	719929	719679
Offset Flat	719898	719648	719899	719649	719942	719692	719943	719693
Round Nose Gouge	719890	719640	719891	719641	719934	719684	719935	719685
Billet Chisel	719892	719642	719893	719643	719936	719686	719937	719687
Cape Chisel	719886	719636	719887	719637	719930	719680	719931	719681
Diamond Point	719888	719638	719889	719639	719932	719682	719933	719683
Hollow Gouge	719896	719646	719897	719647	719940	719690	719941	719691
Half Round	719894	719644	719895	719645	719938	719688	719939	719689
Roughing Tool	719904	719654	719905	719655	719948	719698	719949	719699
Moil Point	719900	719650	719901	719651	719944	719694	719945	719695

Chisel Blanks

Standard Navy Shank

719028 3/4 x 8—Hex Shank

719029 3/4 x 8—Round Shank

Retainer Shanks

718873 1 1/8 x 8—Hex Shank

718874 1 1/8 x 8—Round Shank

STAR DRILLS FOR MASTER POWER CHIPPING HAMMERS



Star Drill
Length 12"

Navy Standard Shanks			Retainer Type Shanks		
Part Number			Part Number		
Dia.	Round Shank	Hex Shank	Dia.	Round Shank	Hex Shank
3/8"	718875	718876	3/8"	718891	718892
3/4"	718877	718878	3/4"	718893	718894
7/8"	718879	718880	7/8"	718895	718896
1"	718881	718882	1"	718897	718898
1 1/8"	718883	718884	1 1/8"	718899	718900
1 1/4"	718885	718886	1 1/4"	718901	718902
1 3/8"	718887	718888	1 3/8"	718903	718904
1 1/2"	718889	718890	1 1/2"	718905	718906

718871 Rotating Wrench star drill

Rammers

Quick acting with fast rapid blow, provides greater ease in handling, with a minimum of shock. For fast ramming on small, medium and large flasks on bench or floor. Also used for pit molding, light backfill tamping, ramming of fire clay, carbon and plastic furnace lining.

Master Rammers have hard chromed piston shafts for extra wear, and unique wiper seals, designed to prevent the pick up of harmful abrasive material.



210 - BABY
RAMMER



2BAP - BENCH
RAMMER



1BA - BENCH
RAMMER

BENCH TYPE SAND RAMMERS SPECIFICATIONS

Model	Rod	Stroke	Bore	Wgt. Includes Rubber Butt	Overall Length	Standard Butt Size	Taper
1BA	Round	4"	1"	10 lbs. 8 oz.	20 1/4"	2 1/2"	802
1BAP	Flat	4"	1"	10 lbs. 8 oz.	20 1/4"	2 1/2"	802
2BA	Round	2 1/2"	1"	7 lbs. 14 oz.	15 1/4"	2 1/2"	802
2BAP	Flat	2 1/2"	1"	7 lbs. 14 oz.	15 1/4"	2 1/2"	802

Standard Equipment: One rubber butt as shown above. Optional in place of standard rubber butt, any butt or pein shown on butt and pein catalog page. Air Inlet 1/4" F.P.T.

Optional at Extra Cost: Piston shafts drilled and tapped, butts drilled for retaining screw. Extra retaining feature used when ramming in close quarters, where wedging action may loosen butts on standard taper. Specify on order.



1F



1BAF



2F

BABY SAND RAMMER SPECIFICATIONS

Model	Bore	Stroke	Overall Length	Weight	Standard Butt Size	Taper
M-210	1"	1"	11-5/16"	3 1/2 lbs.	1 5/8"	801

Standard Equipment: 920-513 Air Regulator.

FLOOR RAMMERS SPECIFICATIONS

Model	Rod	Stroke	Bore	Wgt. Includes Rubber Butt	Standard Butt Size	Taper
1BAF	Round	4"	1"	12 lbs.	2 1/2"	802
1BAFP	Flat	4"	1"	12 lbs.	2 1/2"	802
1F	Round	5"	1 1/4"	21 lbs.	3 1/4"	803
1FP	Flat	5"	1 1/4"	21 lbs.	3 1/4"	803
1FO	Round	5"	1 1/4"	22 lbs. 8 oz.	3 1/4"	803
1FOP	Flat	5"	1 1/4"	22 lbs. 8 oz.	3 1/4"	803
2F	Round	4"	1 1/4"	21 lbs.	3 1/4"	803
2FP	Flat	4"	1 1/4"	21 lbs.	3 1/4"	803
2FO	Round	4"	1 1/4"	21 lbs. 10 oz.	3 1/4"	803
2FOP	Flat	4"	1 1/4"	21 lbs. 10 oz.	3 1/4"	803

Standard Equipment: 3" rubber butt. Optional in place of rubber butt, any butt or pein shown on butt and pein catalog page. "O" on Model Numbers signify oiler type head. Air Inlet 1/4".

Optional at Extra Cost: Drilled and tapped piston shafts, drilled butts.

MASTER POWER RAMMER PISTON TAPERS

- 801 #6 Brown & Sharpe Taper
- 802 #2 Morse Taper
- 803 #2 Morse Taper Short

Protect your wood patterns—reduce shock and lengthen tool life. Moulded to precision machined steel inserts. Always specify type, model and serial number of rammer.



801 - 1 5/8" R
Rubber Butt



802 - 2 1/2" R
Rubber Butt

Tough rubber butts in five diameters, moulded to precision tapered steel inserts are used in foundries or close quarter ramming and "topping off" to prevent damage to costly pattern equipment. The resilient, live rubber "gives" on accidental contact with pattern or flask.

Rubber tipped pins prevent damage in narrow space and close corner ramming.



802 - 2 3/8" PAR
Rubber Tipped Pin



802 - 2 3/8" M
Malleable Iron Butt

803 - 5R
Rubber Butt



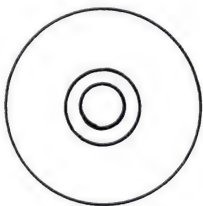
803 - 3 1/4" R
Rubber Butt

For extremely severe ramming operations which cannot be satisfactorily handled with all rubber, or rubber tipped butts and pins, Master Power stocks malleable iron butts and pins in sizes shown in the table. Pins are used to greatest advantage with Master Power flat rod rammers.

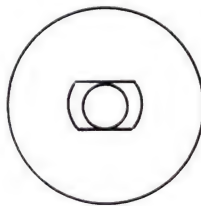
803 - 2 1/4" PM
Malleable Iron Pin



Use of flat rod rammers (indicated by letter "P" in model number) permits close ramming in narrow, confined spaces between the pattern and flask. While flat rod rammers are recommended for use with malleable iron, or rubber tipped pins, standard round face butts of all styles may also be used on these tools.



Standard Round
Piston and Packing
Nut



Flatted Piston and
Packing Nut, prevents
rotation of piston during
operation

ALL RUBBER RAMMER BUTTS

1 5/8" DIAMETER		
PART NO.		USED ON
801 - 1 5/8 R		210 RAMMER ONLY 801 TAPER
802 - 1 5/8 R		1BA - 2BA - 1BAF 802 TAPER
803 - 1 5/8 R		1F - 2F 803 TAPER
2 1/2" DIAMETER		
PART NO.		USED ON
801 - 2 1/2 R		210 RAMMER ONLY 801 TAPER
802 - 2 1/2 R		1BA - 2BA - 1BAF 802 TAPER
803 - 2 1/2 R		1F - 2F 803 TAPER
3 1/4" DIAMETER		
PART NO.		USED ON
802 - 3 1/4 R		1BA - 2BA - 1BAF 802 TAPER
803 - 3 1/4 R		1F - 2F 803 TAPER
4" DIAMETER PART NO.	5" DIAMETER PART NO.	USED ON
802 - 4 R	802 - 5 R	1BA - 2BA - 1BAF 802 TAPER
803 - 4 R	803 - 5 R	1F - 2F 803 TAPER

RUBBER TIPPED PINS

For Flatted and Round Rod Rammers

SIZE	PART NO.	USED ON
2 3/8" x 3/4"	802-2 3/8" PAR	1BA - 2BA - 1BAF 802 TAPER
2 3/8" x 3/4"	803-2 3/8" PAR	1F - 2F 803 TAPER
2 7/8" x 1"	802-2 7/8" PAR	1BA - 2BA - 1BAF 802 TAPER
2 7/8" x 1"	803-2 7/8" PAR	1F - 2F 803 TAPER

MALLEABLE IRON BUTTS

DIAMETER	PART NO.	USED ON
2 3/8"	802-2 3/8" M	1BA - 2BA - 1BAF 802 TAPER
2 3/8"	803-2 3/8" M	1F - 2F 803 TAPER
3"	802-3M	1BA - 2BA - 1BAF 802 TAPER
3"	803-3M	1F - 2F 803 TAPER

MALLEABLE IRON PINS

For Flatted and Round Rod Rammers

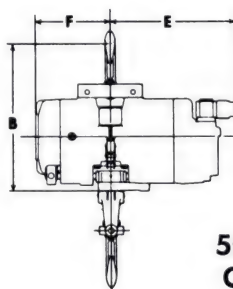
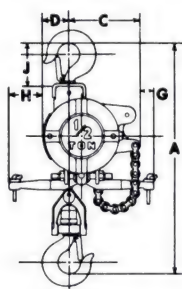
SIZE	PART NO.	USED ON
2 1/4" x 5/8"	802-2 1/4" PM	1BA - 2BA - 1BAF 802 TAPER
2 1/4" x 5/8"	803-2 1/4" PM	1F - 2F 803 TAPER
3" x 3/4"	802-3PM	1BA - 2BA - 1BAF 802 TAPER
3" x 3/4"	803-3PM	1F - 2F 803 TAPER

SPEED CONTROL—Master chain hoists feature variable speed precision load spotting, from smooth pulsation-free creep to top operating speed, with the operator always in complete control.

Starting is smooth with either the pendant (air actuated) or manual control. Both control systems are designed for one-hand operation, leaving a free hand to guide loads.

SAFETY—Loads are lowered safely in case of both air supply or brake failure. Braking components are strong, dependable, and can be adjusted externally. Air motors are explosion proof, eliminate spark or shock hazard and excessive overloads merely stall the motor with no resultant heat or damage to the hoist.

ECONOMY—Air motors do not burn out. Continuous operation at maximum speed and load cause no stress or overheating. Fewer parts in air hoists means less wear and less frequent tear-downs for maintenance. Fully enclosed to seal out dirt and corrosion. Remove only six screws and one pin to expose motor parts for cleaning and maintenance.



**500 and 1000 LBS.
CAPACITY HOISTS**

SPECIFICATIONS

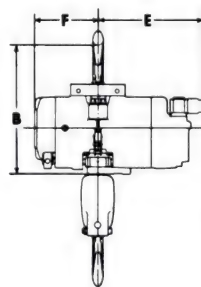
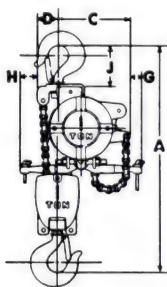
Type	Capacity in Pounds	Lifting Speed F.P.M.*	Lift in Feet	Net Weight in Lbs.
Link Chain	500	90	10	27
	1000	48	10	27
Roller Chain	500	90	10	27
	1000	48	10	27

NOTE: *Speed Based on Line Pressure of 90 P.S.I. is Standard. Faster Speed Available upon Request. Always Install a Filter Lubricator in Air Line for each Hoist.

OUTLINE DIMENSIONS

Type	A	B	C	D	E	F	G	H	J
Link Chain	15 $\frac{3}{4}$	9 $\frac{5}{8}$	4 $\frac{11}{16}$	1 $\frac{13}{16}$	8 $\frac{3}{16}$	5	7 $\frac{7}{8}$	2 $\frac{1}{4}$	2 $\frac{13}{16}$
Roller Chain	15 $\frac{3}{8}$	9 $\frac{5}{8}$	4 $\frac{11}{16}$	1 $\frac{13}{16}$	8 $\frac{3}{16}$	5	7 $\frac{7}{8}$	2 $\frac{1}{4}$	2 $\frac{13}{16}$

All dimensions are in inches.



**2000 LB. CAPACITY
HOISTS**

SPECIFICATIONS

Type	Lifting Speed F.P.M.*	Lift in Feet	Net Weight in Lbs.
Link Chain	24	10	40
Roller Chain	24	10	40

NOTE: *Speed Based on Line Pressure of 90 P.S.I. is Standard. Faster Speed Available upon Request. One Ton Models Include Two Parts of Load Chain. Always Install a Filter Lubricator in Air Line for each Hoist.

OUTLINE DIMENSIONS

Type	A	B	C	D	E	F	G	H	J
Roller Chain	17 $\frac{15}{16}$	10 $\frac{1}{16}$	5 $\frac{7}{16}$	1 $\frac{5}{8}$	8 $\frac{3}{16}$	5	7 $\frac{7}{8}$	1 $\frac{11}{16}$	3 $\frac{1}{4}$
Link Chain	18	10 $\frac{1}{16}$	5 $\frac{7}{16}$	1 $\frac{5}{8}$	8 $\frac{3}{16}$	5	7 $\frac{7}{8}$	1 $\frac{11}{16}$	3 $\frac{1}{4}$



**105 - SL20
1 TON HOIST WITH
MANUAL CONTROL AND
LINK CHAIN**



Model 105-SR-5
1/4 Ton Hoist with
Manual Control, Roller Chain



Model 105-PR-5
1/4 Ton Hoist with
Pendant Control, Roller Chain



Model 105-SL-10
1/2 Ton Hoist with
Manual Control, Link Chain

SPECIFICATIONS

Catalog Number	Load Chain	Rated Capacity	Ft. Per Min. at 90# PSI		Stall Load	Standard Max. Lift	Standard Chain Length	Weight Pounds	Air Inlet
			Lift	Lower					
105-SL-5	Link	500	96	140	750	10 Ft.	11 1/2 Ft.	27	3/8 FPT
105-SL-10	Link	1000	48	70	1500	10 Ft.	11 1/2 Ft.	27	3/8 FPT
105-SL-20	Link	2000	24	35	3000	10 Ft.	22 1/2 Ft.	40	3/8 FPT
105-SR-5	Roller	500	96	140	750	10 Ft.	11 1/2 Ft.	27	3/8 FPT
105-SR-10	Roller	1000	48	70	1500	10 Ft.	11 1/2 Ft.	27	3/8 FPT
105-SR-20	Roller	2000	24	35	3000	10 Ft.	22 1/2 Ft.	40	3/8 FPT
105-PL-5	Link	500	96	140	750	10 Ft.	11 1/2 Ft.	30	3/8 FPT
105-PL-10	Link	1000	48	70	1500	10 Ft.	11 1/2 Ft.	30	3/8 FPT
105-PL-20	Link	2000	24	35	3000	10 Ft.	22 1/2 Ft.	43	3/8 FPT
105-PR-5	Roller	500	96	140	750	10 Ft.	11 1/2 Ft.	30	3/8 FPT
105-PR-10	Roller	1000	48	70	1500	10 Ft.	11 1/2 Ft.	30	3/8 FPT
105-PR-20	Roller	2000	24	35	3000	10 Ft.	22 1/2 Ft.	43	3/8 FPT

Standard Equipment: One hand manual control, Nylon cord, 6' 6" drop from hoist. Forged steel load hooks, full 360° swivel. Safety limit stops upper and lower.

Optional at additional cost: Air actuated, shielded pendant control, standard 6' 6" length of hose, or extra lengths to order. Extra length load chain to order. Chain containers, rigid, or hook, on trolley mounts. Spark or corrosion resistant models.

OPTIONALS and ORDERING SYMBOLS for Model 105 Air Hoists— $\frac{1}{4}$, $\frac{1}{2}$ or 1 Ton Capacities.

Control: S = Standard (Manual)
P = Pendant (Air Actuated)

Chain: L = Link Chain
R = Roller Chain

Capacity: 5 = $\frac{1}{4}$ Ton (500 lbs.)
10 = $\frac{1}{2}$ Ton (1000 lbs.)
20 = 1 Ton (2000 lbs.)

Mounting: No Symbol = Standard Hook
T = Trolley Mount (used with Std. Hook and adjustable for 4" to 12" wide beam)

ORDER EXAMPLE — 105 — PL10T —

105 (Hoist)—P (Pendant Control), L (Link Chain),
10 ($\frac{1}{2}$ Ton), T (Trolley Mount in Addition to Standard Swivel Hook)

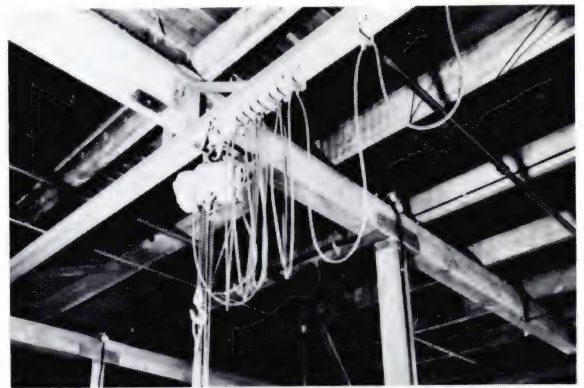


105-574
Hose Trolley

Not Illustrated
105-569 — $\frac{1}{4}$ Ton
Spark Resistant Trolley
105-571 — $\frac{1}{2}$ Ton
Spark Resistant
105-573 — 1 Ton
Spark Resistant



105-568
 $\frac{1}{4}$ Ton Hoist Trolley
105-570 $\frac{1}{2}$ Ton
105-572 1 Ton



Hoist suspended from Trolley
on "I" Beam showing Hose Trolleys

Faster, or slower descent speeds are available with Master Power air hoists at no extra cost.

By adding the suffix letter "C" to the model number of the hoist, a crimson valve will be furnished, slowing the standard descent rate by 20%.

For a 20% faster than standard descent speed add letter "G" to model number indicating GREEN valve.

Examples: **105-SL-10-"C"**

Standard Rate of Descent -- 70 ft. per min.

"C" or Crimson Valve -- 52.5 ft. per min.

105-PR-10-"G"

Standard Rate of Descent -- 70 ft. per min.

"G" or Green Valve -- 87.5 ft. per min.

To order spark resistant, corrosion resistant or trolley mounted Hoists, use suffix letters listed below. Note that these options are available at additional cost.

"E" added to model number denotes spark resistant hoist.

Example: **105-SL-10-"E"** (Link Chain Models Only)

"F" - Fume, or Corrosion Resistance

Example: **105-PL-5-"F"** (Link Chain Models Only)

"T" - Rigid Mounting of Trolley as an integral part of the hoist

Example - **105-SR-20-"T"**



Optional
Roller
Chain (R)



Optional
Link
Chain (L)



Optional
Pendent
Control



105-565
15 ft. Roller Chain Container
Not Shown
105-566 - 30 ft. Roller
Chain Container
105-567 - 25 ft. Link
Chain Container

New Design . . No Gears

Total Power Direct to Blade

FEATURES

NO GEARS: Master Power Air Saws are the first and ONLY saws on the market with NO GEARING. Direct drive, motor to blade.

LIGHT WEIGHT: Ruggedly built for production cutting, the Master Power saw has a high horsepower per weight ratio, with LOW air consumption. It's balanced, in your hand, balanced on the work.

SPECIFICATIONS

Net Weight - 13 lbs., 14 oz.; **Length** 14"; **Width** 7 1/4"; **Height above Work** 8 1/2". **Overall Height** 11 1/2". **Maximum Depth of Cut** (Adjustable from 0 to Max.) at 90° - 2 1/8"; at 45° - 2". **Standard Speed** (Free) 6000 R.P.M. (other speeds available on special order). **Standard Combination Blade** - 5/8" Arbor; 8 1/4" Diameter. **Blade Thickness** 3/16" Max. **Air Inlet** 1/2" F.P.T. **Air Consumption** 14 C.F.M. Free Speed, 30 C.F.M. under normal working conditions, maximum, 44 C.F.M. under severe load. **Standard Equipment:** Wrench, carrying case, combination blade, rip fence and wing screws.

Catalog No. 408 Master Power Air Saw

No. 39888 Steel Carrying Case
No. 37779 Rip Fence

700046 Combination Blade
36382 Wing Screws (2)

Rugged and powerful for time-saving production cutting, yet light in weight and balanced for easy one hand operation, the Master Power Saw incorporates all of the features needed in an all-around construction tool . . . Governor controlled speed at 6000 R.P.M. . . . Highest speed on the market . . . the **FIRST** and **ONLY** portable saw to eliminate gearing entirely . . . Vibrationless, high load speed motor, capable of continued maximum cutting rate hour after hour, without harm . . . no blade coast, no dangerous "kick back" when the trigger is released.

Large blade guard retracting lever is safer, makes blade changing easy . . . Fast adjustments, front and rear for "depth of cut", bevel, and pocket cuts . . . 5/8" arbor fits a wide variety of blades and abrasive discs for cutting any normal construction material.

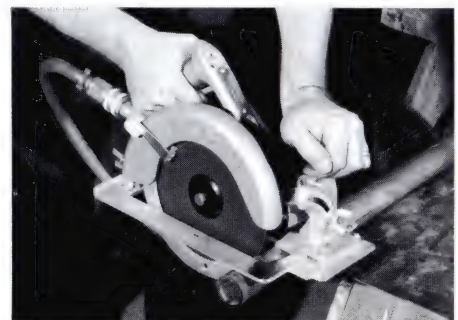
Rugged, quiet and dependable, safe under all weather conditions, the Model 408 is engineered for a long and useful life.



Bevel Cut . . . 2" Rough Lumber



Fast cut-off on tough Asbestos Composition Transite.



Abrasive Wheels make short work of pipe, or tubing cuts.

BALANCERS

Master Power balancers, easily adjustable within their capacities, are usually suspended over work benches or along assembly lines, to counterbalance the air tool in use, and to keep it within reach of the operator.

FEATURES:

- Avoids tool abuse
- Saves wear on external surfaces
- Reduces operator fatigue - increases production
- Tools quickly attached or detached

Catalog Numbers

No. 719790	0-5 lb. Capacity
No. 719791	5-10 lb. Capacity
No. 719792	10-15 lb. Capacity
No. 719793	20 lb. Capacity
Capacities up to 75 lb. available	



Model 5C
Balancer

AIR HOSE

No. 718948	1/4" I.D. Air Hose—Specify Length (Feet), Specify Pipe Fitting 1/4" M.P.T.
No. 718949	3/8" I.D. Air Hose—Specify Length (Feet), Specify Pipe Fitting 3/8" M.P.T.
No. 718950	1/2" I.D. Air Hose—Specify Length (Feet), Specify Pipe Fitting 1/2" M.P.T.

Air Hose



HOSE WHIPS

No. 718962	1/4" I.D. Hose 8 Ft. Long w/2 1/4" MPT Nipples
No. 718963	3/8" I.D. Hose 8 Ft. Long w/2 3/8" MPT Nipples

COUPLERS AND NIPPLES — VALVE TYPE

Hose Size	With Male Thread		With Female Thread		With Hose Barb	
	Coupler	Nipple	Coupler	Nipple	Coupler	Nipple
1/4"	719020	719011	719019	719010	719021	719012
3/8"	719023	719014	719022	719013	719024	719015
1/2"	719026	719017	719025	719016	719027	719018



Valve Couplers



Plain Nipples

COUPLERS AND NIPPLES — PLAIN TYPE

Hose Size	With Male Thread		With Female Thread		With Hose Barb	
	Coupler	Nipple	Coupler	Nipple	Coupler	Nipple
1/4"	719002	718993	719001	718992	719003	718994
3/8"	719005	718996	719004	718995	719006	718997
1/2"	719008	718999	719007	718998	719009	719000



Typical Quick Connect
Air Hose Couplings



HOSE NIPPLES

Part No.	Size M. P. Thread	Size Hose Barb
718967	1/4"	1/4"
718968	1/4"	3/8"
718969	3/8"	3/8"
718970	3/8"	1/2"
718971	1/2"	1/2"



Hose
Nipples

HOSE CLAMPS

Part Number	Hose Size
718964	1/4"
718965	3/8"
718966	1/2"



Hose
Clamps

LUBRICANTS

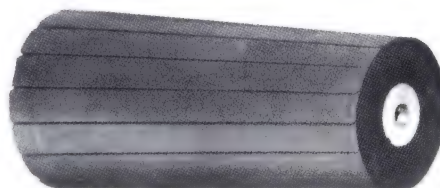
No. 718951	Impact Wrench Grease	1 lb. Can
No. 718952		5 lb. Can
No. 718953		10 lb. Can
No. 718954	Gear Train Grease	1 lb. Can
No. 718955		5 lb. Can
No. 718956		10 lb. Can
No. 718957	Gear Train Grease (Hoist Only)	1 lb. Can
No. 718958		5 lb. Can
No. 718959		10 lb. Can
No. 718960	Oil (Rotary & Percussion Tools)	1 Pint
No. 718961		1 gallon

EXPANDING SLOTTED RUBBER DRUMS

For use with abrasive sleeves, on Master Power Model 610 or Model 650 grinders. No. 650-60 adapter permits use of drum on Model 650 spindle.

No. 719951 Tapered Cone Drum — $\frac{3}{8}$ "-11 Thread
1 $\frac{1}{2}$ x 1 $\frac{1}{4}$ x 3 $\frac{3}{4}$ " Face (Illustrated)

No. 719950 Straight Drum — $\frac{3}{8}$ "-11 Thread
2-13/32 Diameter x 2 $\frac{3}{4}$ " Face



No. 719951
Expanding Slotted
Rubber Drum

FILTERS - REGULATORS - LUBRICATORS - COMBINATIONS

Size F.P.T.	Part No. Filter	Part No. Regulator & Gauge	Part No. Lubricator	Part No. Filter-Lubricator	Part No. Filter-Regulator Lubricator-Gauge
$\frac{3}{8}$ "	719959	718919	719957	719955	719953
$\frac{1}{2}$ "	719958	718918	719956	719954	719952
$\frac{3}{4}$ "	718920	718917	718916	718915	718914



719957
Lubricator



719959
Filter



719955
Filter Lubricator
Combined Unit



719953
Air Flow, Right to Left
Filter, Regulator and Lubricator

TORQUE ANALYZERS

TA-1



For Hand Testing of Power Torque Tools

This device is designed to pre-set adjustable and torque limiting clutches to a predetermined setting. By coupling only the clutch unit to the male hex drive of the analyzer, and by hand rotating the drive end of clutch unit, a torque reading will appear on the dial. This will indicate torque adjustment and spring tension of this clutch unit.

NOTE: This torque analyzer cannot be used to test torque setting of a clutch unit while installed on a power tool. Calibration is in increments of one inch pound up to 120 inch pounds and from there on in increments of one foot pound up to a maximum of 50 foot pounds.

TA-2



For Power Screwdrivers

This analyzer measures torque output of small power hand tools, and is particularly useful in testing the torque setting of the Master Power Torque Limiter.

Capacity 0-150 inch pounds. Dimensions are: 5" wide, 18" long, 8" high. Wt. 20 lbs. Drive: $\frac{1}{8}$ " male hex.

The **Master Power** Guarantee

Every Master Power product has been carefully inspected before shipment and we guarantee to correct any defect caused by faulty material or workmanship. Our obligation assumed under this guarantee is limited to the replacing of any part or parts which prove to our satisfaction, upon examination, to have been defective and which have not been misused or carelessly handled. The complete unit must be returned to one of our Factory Service Branches or to our Factory, transportation charges prepaid. We reserve the right to decline responsibility where repairs have been made or attempted by others. No other guarantee, written or verbal, is authorized on our products.

All Master Power Air Tools are manufactured to extremely close tolerances to provide the user with Premium Power. Reasonable care and preventive maintenance will greatly prolong their service life and will more than justify the original cost when measured in more work done in a shorter period of time.

Dry, clean compressed air is a must at 90 lb. per square inch gauge pressure **AT THE TOOL**, measured when the tool is running.

Air Line filters and lubricators are strongly recommended for all types of air operated equipment.

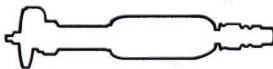
Master Power's Technical Service Department will be glad to help you in this direction.

Hose Size — on all tools the hose size (inside diameter) should be the same as the pipe thread inlet of the tool, i.e. $\frac{3}{8}$ " F.P.T. use $\frac{3}{8}$ " I.D. hose up to 20 feet in length. If longer hose is required, use the next large size I.D. hose.

Peak performance on all rotary motor tools is best maintained by replacing rotor blades when worn to $\frac{3}{4}$ of original size.

REPAIRS

Send tools to authorized Master Power Service Branches **ONLY**.



ABRASIVE TOOLS

LUBRICATION — Master Power number 718960 non-fluid oil is recommended. Without air line lubricator, tools must be oiled daily.

CAUTION WITH ABRASIVE WHEELS & WIRE BRUSHES

Do not run wheels at free speeds greater than speeds recommended by the wheel or wire brush manufacturer.

Use only proper size and type of wheel mounting flanges.

Safety wheel guards must be used at all times and operators should always wear safety goggles for eye protection.

Should it ever be necessary to dismantle a grinder and work on the governor — **NEVER** put a wheel back on the grinder until the free speed has been checked with a tachometer.

It is extremely good practice to regularly check grinder free speeds as a matter of good safety practice.

Wheel mounting should be checked for running true with spindle.

HOISTS

CHAIN — Both roller and link chains are normal wearing parts which should be checked periodically to avoid damage to other more expensive parts.

Roller chain should be replaced when length of twenty links, pin center to pin center, exceeds $12\frac{7}{8}$ inches. Link chain should be replaced when length of 20 links exceeds $15\frac{7}{16}$ inches.

LUBRICATION — Hoists should not be used without an air line lubricator. Self contained gear box doesn't usually require periodic replenishing. Gear box grease is Shell ALVINA EP 2. For motor, Master Power 718960 oil is recommended.

Replacement chains should be lubricated before installation with (1) Penetrating Oil #2 with colloidal graphite or (2) Black Bear C. L.

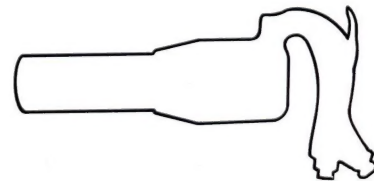


IMPACT WRENCHES

LUBRICATION — Motor uses Master Power 718960 Oil. For impact mechanisms, Master Power 718951 is recommended. Do not overgrease.

Use wrench only within rated bolt size capacity and if impact time required is more than four seconds, use the next larger size of impact wrench.

Worn sockets will reduce tool efficiency and extra large, or heavy, special type driving attachments can cause premature failure to impacting clutch parts.



PERCUSSION TOOLS

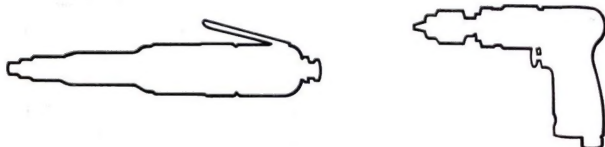
LUBRICATION — Master Power #718960 oil or equivalent.

Air line filters and lubricators should be used but if line oilers and filters are not available, tools should be lubricated daily. Because of the extremely close tolerances of moving parts in percussion tools, good filtering of the air to remove foreign particles and moisture will greatly add to their operation and efficiency.

SCALERS — Avoid running tool when it is not against the work piece, otherwise premature failure of handle and barrel can occur.

CHIPPERS — Excessively worn tool nose bushings and chisel shanks reduce tool performance and can cause chisel breakage.

RAMMERS — Packing nuts should be kept tight enough to snug the wiper seal packing to prevent sand from working into tool and also to maintain compression.



ROTARY TOOLS

LUBRICATION — For motor lubrication, use Master Power 718960 oil and for the gear train, Master Power 718957 grease.

If used without line lubricator tool should be oiled daily.

Always use tools of this type within their rated capacity.

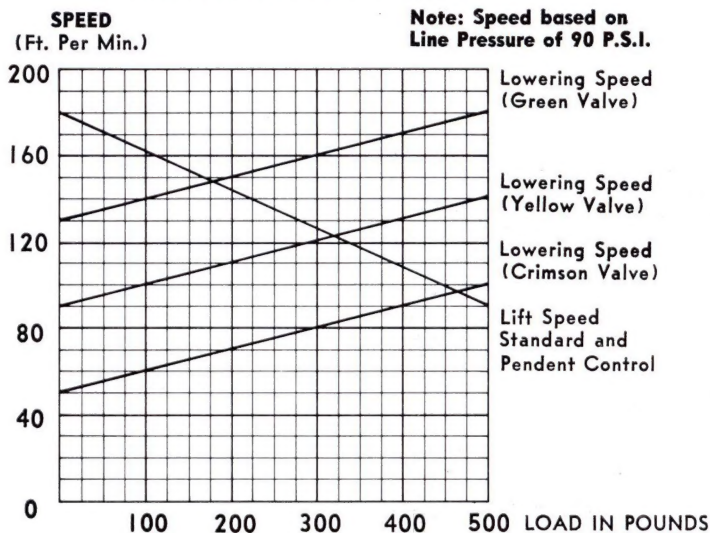
Allow for approximately 15% loss of power (torque) when using angle head attachments.

For best results, use 600 RPM speed for tools equipped with Master Power Torque Limiter clutches.

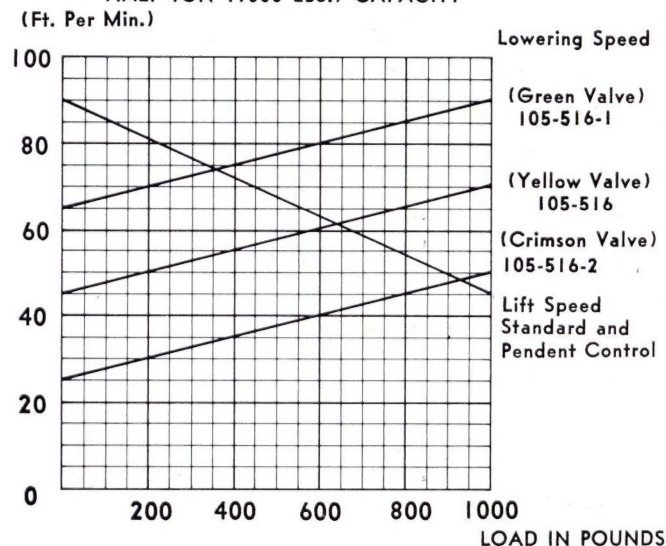
AVERAGE AIR CONSUMPTION, HORSEPOWER AND CAPACITY OF MASTER POWER AIR TOOLS

Model	Nominal H. P.	Average Air Cons. at Load	Capacity
105	1 1/2	48 CFM	1/4, 1/2 and 1 Ton
201-2010	1	32 CFM	5 in. and 7 in. disc
401-408	2-1/3	44 CFM	4 and 5 in. cup wheel
501	1/3	12 CFM	1 in. dia. mount. point
550	1/3	12 CFM	1 in. dia. mount. point
601	4	75 CFM	6 in. cup wheel
602	3/4	26 CFM	2 in. dia. wheel
604-605	2 1/2	48 CFM	4 in. dia. wheel
606-607	3	64 CFM	6 in. dia. wheel
608-609	2-1/3	54 CFM	8 in. dia. wheel
610-611	2-1/3	44 CFM	6 in. dia. wheel
613	1/2	14 CFM	2 in. dia. wheel
615	3/4	26 CFM	2 in. dia. wheel
616	1/2	16 CFM	2 in. dia. wheel
640	1 1/4	32 CFM	3 in. dia. wheel
640RA	1	32 CFM	3/8 and 1/2 drill
905	1	32 CFM	3/8 and 1/2 drill
650-9000	1-1/3	28 CFM	4 in. dia. wheel
650-12000	1 1/2	32 CFM	3 in. dia. wheel
811-815	1/5	8 CFM	#4-#10 mach. screw
831-835	1/3	10 CFM	#8-1/4 in. mach. screw
900	1/3	12 CFM	1/8 to 3/8 drill
901	1/3	12 CFM	1/8 to 1/4 drill
9200	—	10 CFM	1/4 to 5/16 bolt
9502	—	18 CFM	3/8 and 1/2 bolt
J970	—	28 CFM	5/8 and 3/4 bolt
990	—	36 CFM	3/4 and 1 1/4 bolt

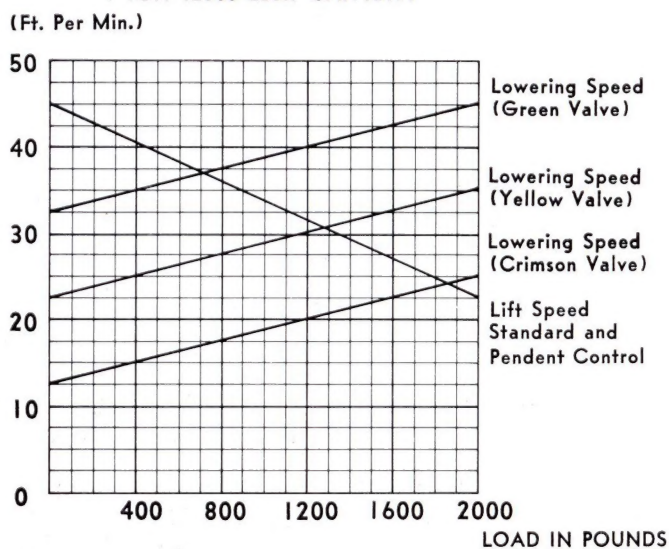
QUARTER TON (500 LBS.) CAPACITY



HALF TON (1000 LBS.) CAPACITY



1 TON (2000 LBS.) CAPACITY





MASTER POWER CORPORATION

SOLON, OHIO

Master Power Air Tools Are Sold Through Leading Distributors

AND HERE'S WHY

Buying through Distributors is like having an almost inexhaustable warehouse of tools, equipment and parts within messenger distance from your desk.

Into it, by truck, airline and trainload flows a wide variety of products selected by Distributors, for quality, performance and service, from thousands of sources all over the world.

From this supply, your Distributor can fill your every need, quickly, economically, with the experience on which he has built his reputation.

It's Convenient . . . because it pinpoints your buying to fewer sources . . . cuts down "hunting" and paper work . . . gives you immediate catalog and price information . . . superior credit facilities . . . saves trans-

portation costs . . . reduces purchasing and accounting expenditures and places needed products as close as your telephone.

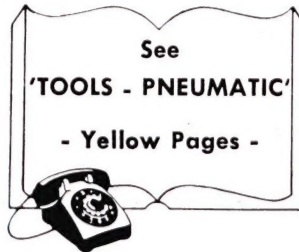
What Master Power Offers You Through Your Distributor

Teamwork, between your Distributor and Master Power's Technical Service Department, gives you personal service that helps you get the most for your money, and insures a steady flow of cost-cutting technical "Know How".

Depend on your Distributor, backed by Master Power's well deserved reputation for factory service. Trained air tool specialists, from our Technical Service Department are always available for expert evaluation and design of your plant air tool requirements.

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